

# The Journal of **ELECTRICAL WORKERS** AND OPERATORS

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VOL. XXVI

WASHINGTON, D. C., JANUARY, 1927

NO. 1

## *Some Aspects of High Wage*

*Economy*



OFFICIAL PUBLICATION  
INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS

DEVOTED TO THE  
CAUSE OF  
ORGANIZED  
LABOR



AFFILIATED WITH THE  
AMERICAN FEDERATION  
OF LABOR IN ALL ITS  
DEPARTMENTS

# DO CARE AND PRUDENCE "STEP OUT" WITH YOU?

Everywhere now we are hearing about "THRIFT WEEK," and the admonition to "SAVE" and "BEGIN THE NEW YEAR RIGHT."

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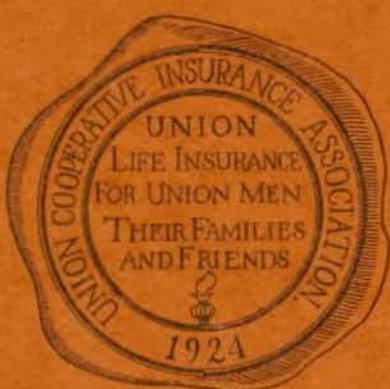
Thrift is defined as "care and prudence in the management of one's resources."

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WASHINGTON, D. C.

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**INTERNATIONAL  
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 506 Machinists' Bldg., Washington,  
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 NIAZET, 506 Machinists' Bldg., Wash-  
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**Magazine Chat**

Yes, let's say it—Happy New Year. And again, a New Happy Year. Shake, Old Top.

Let's talk about ourselves, our jobs as scribes, and our common project the JOURNAL. I can think of no better way to start the New Year. In this issue, some fellow pen-pusher remarks, "let's have a letter from every local every month." Yes, I have faced the problem often, boys, quite frankly, in the wee sma' hours of the morning, when lying awake thinking—maybe worrying about the JOURNAL—and while mopping the cold sweat from my lofty brow, I reached the conclusion that a letter every month from every local would bankrupt the union.

Now, don't misunderstand me. I'd love to have 'em, honest. It would make this the greatest labor magazine in America. But figure it out. 1,000 locals; 1,000 letters of 500 words each, 500,000 words, or a publication five times as large as the whole present JOURNAL to hold the correspondence alone.

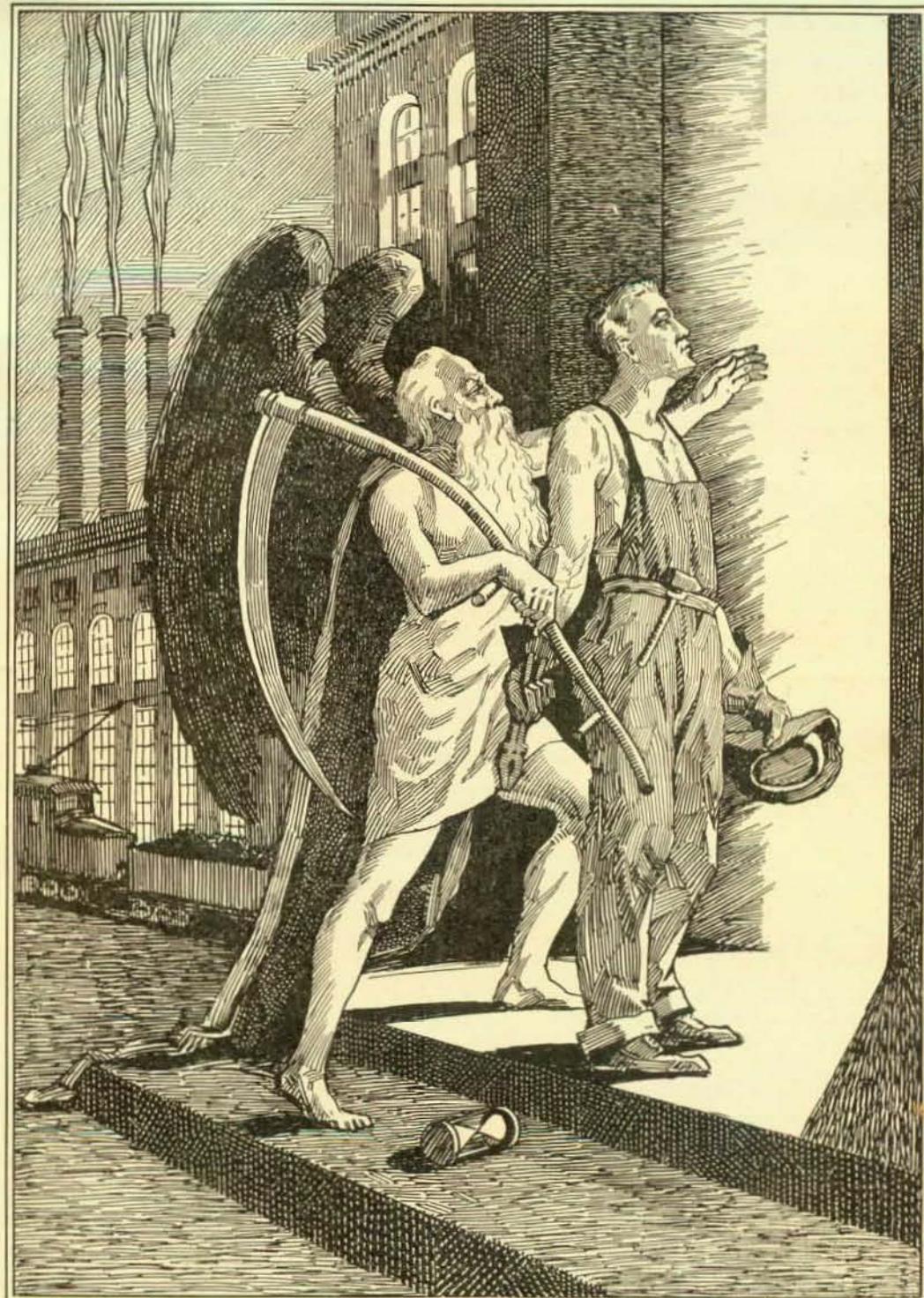
It's not pleasant to face this hard fact, i. e., our ideal of a letter every month from every local is shattered on the reef of economic necessity. So it goes, boys. The dollar pinches us all.

Here is the score as made by the press secretaries in 1926:

Special articles by press secretaries, 21.

Special correspondence, 11.  
 63 locals appeared - - - - once  
 40 " " " - - twice  
 32 " " " - - 3 times  
 26 " " " - - 4 times  
 7 " " " - - 5 times  
 11 " " " - - 6 times  
 5 " " " - - 7 times  
 2 " " " - - 8 times  
 5 " " " - - 9 times  
 4 " " " - - 10 times  
 2 " " " - - 11 times  
 1 " " " - - 12 times

As much as we hate to say it, 50 letters of 1,000 words each are all the JOURNAL can handle in a month under the present size, or 100 letters of 500 words each. The cards are on the table. Let your conscience be your guide. But for heaven's sake, boys, don't stop sending stuff in. We want 50 of the liveliest, most thoughtful, brilliant labor letters each month that the North American continent can produce.



The Future Belongs to Labor



# THE JOURNAL OF ELECTRICAL WORKERS & OPERATORS

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VOL. XXVI

WASHINGTON, D. C., JANUARY, 1927

No. 1

## “Present Fractional Ratio of Profit Distribution”

THE phrase at the head of this article is that of Lloyd Morris, a consulting engineer, in Los Angeles, taken from his article in the December American Federationist, entitled “Some Fundamentals in Industrial Relations.” The phrase bears nicely upon the present wage situation in the United States. Translated out of a technologist’s language, into terms of the shop, the phrase means, is labor getting its full share of what collective industry produces?

This is not a mere academic question. It is pertinent to the very hour of wage development. How pertinent may best be illustrated by a recent attack on the position of building trades in industry, carried by the Bulletin of the National City Bank, New York City, for November, 1926. The National City Bank is the dominating financial institution of the country. Its bulletin circulates widely among banking institutions, and chambers of commerce of the country. It is edited with a good deal more freedom than most of the popular journals by trained economists, and often shows streaks of liberalism. For instance, in November, 1925, it spoke favorably of the then recent President Green’s utterance of organized labor’s wage policy based on the share-in-production theory. All the more significant, therefore, is the present contention of the bank that the building trades are acting outside of justice in seeking higher wages.

### Making Someone the “Goat”

Stripped of its verbiage, the article in reference takes this position: the farmers are being unjustly treated. The railroad workers, and other industrial groups are being unjustly treated. By whom? By the building trades workers. The building tradesmen, due to a strategic industrial position created by the war, are taking a huge share out of profits. This wage slice is being passed on to the consumer, and is reflected not only in high rents, but in high freight rates, and in a general high living level. In short, the National City Bank is willing to make the building trades “the goat” for the nation’s economic ills. Let us quote:

“The application of the railroad men for more pay is under arbitration and entitled to a careful, impartial hearing. We do not care to discuss their claims beyond a few comments upon the general situation. Mr. Doak says that it is important to have a contented body of railroad men, which of course is true. It is important that the building trades be contented also, and the farmers, school teachers and ‘white collar’ workers as well. They all belong in the picture, all have claims to fair treatment, and it is impossible to justly determine the claims of any group without considering how all the other groups will be affected. The best hope of securing general content-

ment is by an honest effort all around to understand how one’s own claims affect other people.

“Throughout all the employments of our highly specialized industrial system, individuals while nominally working for employers, in reality are exchanging services, and whether wages seem to be high or low depends upon the relationships—whether the exchange of services is on a fair basis. It is impossible to contend that a railroad engineer or conductor is not entitled to as much pay as an unskilled laborer in the building trades, but according to representations in the present hearing, he does not receive it. This, however, does not close the case, for there are other people whose rights are affected. \* \* \*

“The question at the moment agitating the farm population is whether in considering the proper compensation of railroad employees it will not be just as reasonable to take account of the compensation of farmers as of the pay of the building trades? The number of farmers is several times that of all the building trades and railroad employees combined, in fact with their families approximates 30 per cent of the entire population. In view of the inferior position which they have occupied for now five years, what argument can be given for placing additional burdens upon them in order to raise the highly organized trades to higher rates?”

### Naïve Explanation

This is ingenious to say the least, and is contrary to the position taken by the bank last year, when its bulletin said:

“All plans for increasing productions necessarily contemplate a corresponding increase of consumption, and the only way that consumption can be obtained is through a constant increase in the buying power of the masses.”

And to defend its new, and we think absurd, position, the bank says this year, this:

“It is of great importance that real wages, as measured by the standard of living, shall be always rising, but this is not accomplished by wage-advances which are passed on to consumers. It is accomplished only by increasing the output of the industries, so that more is available to everybody at no greater labor cost than the former supply. Attempts to improve the general position of labor by pushing up wages by groups is simply a game in which the groups most favored by conditions—as the building trades have been since the war, and other trades may be by superior organization or command over public necessities—win at the expense of others less favored but possibly in greater need and rendering services no less exacting or important.

“The argument that money wages must be increased in order that an increased production may be consumed is a fallacy, because a broader increase of purchasing power results from a reduction of prices, which releases purchasing power to the entire population at one stroke.”

Such a position as the National City Bank takes lays itself open to the following refutations:

1. Granted that economic groups contending for profit distribution should be held in check, and equitably adjusted to each other, what agency in the commonwealth, is to do the judging and apportioning? Surely not one of the economic groups itself, say, the banking group; and if it is to be a super-group like the federal government, is not this a brand of socialism that the National City Bank would be loath to embark upon?

2. How is it that no other agency in the country, save the National City Bank, has attributed the farmer’s economic downfall, to the building trades? Neither the department of agriculture, nor the congress, nor the farmers themselves.

3. It can be shown, can it not, that the building trades have not received as yet a wage which may be described as a marginal wage, a sum sufficient to create for each individual worker a surplus for saving, insurance, study and self-development, and to offset seasonal employment?

4. Granted that a judicial agency should be set up to allocate equitably a share of the national income to each economic group, is not any economic group justified, until that Utopian time has arrived, in securing a just apportionment to itself?

5. Is the National City Bank Bulletin prepared to show that the drive for higher wages by the building trades has not been a large factor in the present era of so-called prosperity?

6. Has labor at any time been in control of the industrial and financial situation, at any time in the last ten years, or at any time in the history of the nation, and haven’t the bankers more approximately been in control than any other group?

7. Finally, what part does the more than just share of profits distributed to employers, bankers and profiteers, play in the inequitable distribution of income among economic groups?

The Norwegian government plans to build a broadcasting station at Frederikstad.

### “The Foreman”

On page 16 of this issue a story by, for and of workers published for the first time in America.

# Have "Economic Laws" Been Sent to Scrap Heap?

WHERE wages are poor, organization is the weakest. This appears to summarize the wage situation throughout the United States. The converse of the principle is also true. Where wages are good, organization is the strongest. Hence the current phrase, "high wage economy," meaning that demands of organized labor have been widely met this year on the industrial field.

Three questions now arise.

1. Is organized labor getting its just share of profits? An answer to this question is given on the preceding page.

2. Is prosperity real, or are those economic groups which feel the economic pinch merely voiceless, or impotent? A partial answer to this question is given in the preceding article.

3. What have been the effects of this so-called high wage economy upon industry in general? Conclusive answers to this question cannot be had, because not enough time has elapsed since high wage economy has been instituted, but we report what the prevailing views are:

## Business Cycle Is Flattened

There is disposition on the part of business leaders to regard the recurring periods of depression and prosperity—called the business cycle—as obsolete. (It is needless to say we regard this view as over sanguine, and we make an appeal to labor to accept their point of view most cautiously. We have continually pointed out that high wages are only one factor, though no doubt the main factor in the present good times. Should the business barometer start falling, would employers continue their high wage policies?—this is the acid test.)

O. H. Cheney, vice president, American Exchange-Irving Trust Company, New York City, writing in the Nation's Business, for December, official organ, U. S. Chamber of Commerce, says:

"'It Ain't Gonna Rain No More' seems to have become the national anthem of American business. For many the business cycle has stopped—they believe that the man who invented it got disgusted with the way the contraption has been working and scrapped it by the roadside.

"Life has been one record after another and we have revelled in unprecedented prosperity since the unfortunate days of 1921. Even the past summer has been unseasonably active—it has been a long, hard summer of 'hibernation' for the business bears.

"Spectacular is only mildly descriptive of the picture which even the sober bank review and the solemn government surveys have been painting of the past year. The indexes have vied with each other in overtaking the apparently impossible. Bank transactions, freight traffic, building, automobile output, iron and steel volume, retail sales—all seem to have proved by unquestionable figures and graphs that the prosperity we have been feeling must have been real. \* \* \*

"In the business cycle they have come to picture business as a glorified kind of aquaplaning or chute-the-chute or toboggan slide with the pleasure reversed. They have been led to believe that depression follows prosperity as the night the day—and therefore we must now be having an Arctic summer with an Aurora Borealis.

"But the more pessimistic picture, it, here we are soaring along beautifully when suddenly we hit an air-pocket and do a nose-dive and wake up to find a nice, gentle economist dressed in white bending over us, holding our wrist and telling us we'll be better in six months.

"I first learned about the business cycle in Sunday school; so that when, several years later, the heavy economists discovered it, I knew that they must be right. Joseph, in the time of the Egyptian Pharaohs, was the first to try to fool the business cycle. He knew by the old-fashioned charts, which they called dreams, that seven lean years followed

seven fat ones; so he stored up grain. Because of my religious introduction to the subject my heart is inclined to be fundamentalist on the business-cycle theory. I cannot criticize it. But my head is always trying to prove that my friends, the economists, may have missed something—that there are many things they do not yet know—that in their mechanistic fatalism they have not given enough freedom to the will of mankind."

Carl Snyder, statistician of the New York Federal Reserve Bank, is quoted in this same connection by Mr. Cheney as follows:

"There is no objective evidence that the cycle recurs at regular intervals. \* \* \* The subjective element very often invalidates such measures, as is evident by the lack of agreement among economists as to the length of cycles, what constitutes a cycle," etc.

Percy H. Johnston, president of the Chemical National Bank, New York City, joins the chorus. In a copyrighted interview with Associated Press, Mr. Johnston declared: "America will be prosperous as long as labor is fully employed at high wages," and he adds that he saw nothing on the horizon to suggest that this basis for prosperity would not be available in 1927. Mr. Johnston believes the long-term commodity price trend is gradually downward, and is of the opinion that this development will help America to compete in markets for world trade after Europe has been restored to normal.

Andrew Mellon, Secretary of the U. S. Treasury, one who ought to know, finds the "high earning power of our people" a main factor in present prosperity. In his 1926 report, he says:

"From the preliminary tax figures of profits and earnings for the calendar year 1925, just compiled, it can be safely stated that the country has reached a level of national income not before exceeded. Nineteen hundred and twenty-six has brought no indication of an ebbing of this high tide, and I believe this year has been as satisfactory as the last. This country has undoubtedly been exceedingly prosperous for the past few years and prosperity is continuing. We have worked hard and we have progressed."

"\* \* \* The high earning power of our people, from which comes our great buying capacity, is indicated by increases in sales during the year by mail-order houses and of agricultural implements, motor cars, tractors, and many other articles once considered luxuries. Another indication of well-being is the amount of travel abroad and within the country by train and motor. The strength of our present prosperity is the broadness of its base; yet with all this spending, savings accounts have gone up, more insurance is being written, and sound securities are sought by the small investor."

Lou E. Pierson, chairman of the board, Irving Bank, New York City, finds that "high production, high wages and high consumption are the cardinal principles of modern American industry. We see our country prosperous, our industries trebling, and our people employed," he declares.

Herbert Hoover, Secretary of Commerce (in his 1926 report to Congress), finds the business cycle has been flattened. "The curve of the business cycle has in the belief of the department been considerably flattened and very large national waste has been to a considerable degree eliminated."

At the same time, William J. Tracy, secretary-treasurer, Building Trades Department, A. F. of L., believes "the building industry throughout this entire country will not only continue, but will increase in volume." He continues:

"Available authentic information indicated that the present prosperity in the building industry throughout this entire country will not only continue during 1927, but will increase in volume. That is as it should be, because there is no known investment which

is safer than that being made in the building development of America.

"Building construction costs, in my opinion, probably will never fall below their present level; not sufficiently, at least, to warrant building and financial interests in postponing contemplated construction projects. Naturally, there may be some fluctuation in the costs of building materials, but any permanent important reduction appears very unlikely for many months."

## Cost of Living Falling

One of the hard and fast "economic laws" to which employers have been wedded is this: high wages bring high cost of living. This is a spectre that has walked across the scene of many a wage conference to the consternation of workers. Indeed so hard is it to lay this ghost, that many employers in the building trades field today are still trying to resist demands for increased wages on the grounds that high wages make the consumer poor, by boosting the cost of living.

And now what has happened in the face of the general high level of wages reached and maintained during the last years: the cost of living is falling.

The Labor Bureau, Inc., makes this analysis of the situation:

"Wages are going up and living costs down. Wage increases continue at a fairly constant rate. The same number of gains were reported this November as last. The only significant factor in the scale changes noted was that for the first time the building crafts did not bulk large in accretions to pay. Only two increases were reported for all construction workers throughout the country. Transportation employees, on the other hand, were granted more increases than in any other month this year. The printing trades, as usual, report more advances than other groups.

"Average earnings are also on the increase; all October reports registered gains except in Massachusetts, where there was a one-half of 1 per cent decline, due primarily to losses by silk goods workers. For the country as a whole October saw gains ranging from 1 to 5 per cent, which brought weekly wages to a level from 2 to 3 per cent in advance of last year at this time.

"Real wages have increased even more with an increasing weekly pay envelope. Smaller outlays were needed for the necessities of life, although the biggest item in the worker's budget—food—went up about 1 per cent during the month."

This decrease in the cost of living has come about how? Simply by taking the increase in wages—not out of the consumer, by boosting prices—but out of the following processes of production, according to B. C. Forbes, conservative financial writer:

1. Machinery has increased efficiency, and bettered production.
2. Railroads have improved their service.
3. Money rates have gone down.
4. Electrical power has lowered power costs.
5. Workers are generally and highly efficient.

Touching on this last point, Mr. Forbes asserts: "American workers were never before as loyal, as industrious, as intelligent, as efficient as they are today."

This may be, in the terms of the street, "the old apple-sauce." It is too early to maintain that the cost of living has permanently receded, still the trend downward is there, and should be observed with warm attention by all concerned. But it is nothing short of a revolution in management that organized labor has worked. By its high wage demands, it has forced management to an unprecedented pitch of efficiency.

## Waste Is Being Eliminated

Continuing the foregoing, the report of Herbert Hoover, Secretary of Commerce, is of immediate significance.

"The general movement throughout the country for elimination of waste in production and distribution has made steady progress. The Department of Commerce, in continuation of its work of the past five years, has devoted much of its activities to this end. • • •

"The high standards of living enjoyed by the American people are the result of steadily mounting per capita productivity. There is only one way to further advance these standards, and that is by improved methods and processes, by the elimination of waste in materials and motion in our production and distribution system. The moral and intellectual progress of the nation is not the offspring of poverty or low living standards. The incentives to crime decrease with increasing security; the opportunity for education, and the growth of understanding are the products of economic progress—not of economic degeneration. Devotion to economic improvement whether in individual effort or in improved methods enlarges the field of leadership; it is not a stimulant of idle or luxurious living.

"Just as 20 years ago we undertook nation-wide conservation of our natural resources, so we must today even more vigorously sustain this campaign of better nation-wide utilization of our industrial resources and effort. More especially is this the case in view of the many complex forces which have arisen from the war, and particularly the difficulty of maintaining our situation as against the competition of a world of lower standards overseas.

"The term 'elimination of waste' is subject to some objection as carrying the implication of individual or wilful waste. In the sense used in these discussions elimination of waste refers wholly to those wastes which can be eliminated solely by co-operative action in the community. It does not refer to any single producer, for in the matters here discussed he is individually helpless to effect the remedy.

"Nor does the elimination of such wastes imply any lessening of fair competition or any infringement of the restraint of trade laws. In fact, the most casual investigation of the work in progress will show that its accomplishment establishes more healthy competition. It protects and preserves the smaller units in the business world. Its results are an asset alike to worker, farmer, consumer, and business man.

"It may be worth while repeating the major directions for national effort as they were outlined by the department at the beginning of the undertaking five years ago:

"1. Elimination of the waste imposed by inadequate railway transportation, by improved equipment and methods, and the establishment of better co-operation.

"2. Vigorous utilization of our water resources for cheaper transportation of bulk commodities, flood control, reclamation and power.

"3. Enlarged electrification of the country for the saving of fuel and labor.

"4. Reduction of the great waste of booms and slumps of the "business cycle" with their intermittent waves of unemployment and bankruptcy.

"5. Reduction of seasonal variations in employment in contraction and other industries.

"6. Reduction of waste in manufacture and distribution through the establishment of standards of quality, simplification of trades, dimensions, and performance in non-style articles of commerce; through the reduction of unnecessary varieties; through more uniform business documents such as specifications, bills of lading, warehouse receipts, etc.

"7. Development of pure and applied scientific research as the foundation of genuine labor-saving devices, better processes and sounder methods.

"8. Development of co-operative marketing and better terminal facilities for agricultural products in order to reduce the waste in agricultural distribution.

"9. Stimulation of commercial arbitration in order to eliminate the wastes of litigation.

"10. Reduction of the waste arising from industrial strife between employers and employees."

On the other hand, Stuart Chase, economist, attached to the Labor Bureau, Inc., in his vivid book "The Tragedy of Waste," which is destined to be "news" for sometime, discovers four principal sources of waste. He in turn groups the principal sources of wastes in these four departments



THESE MEN FACE DEATH EVERY DAY ON THE WIRES

While Employers Speak of High Wages, the Question of Hazardous Employment Should Enter the Discussion as a Determinant

of industry, so that one gets an industrial map which looks like this:

"1. Chief source of waste: Production of goods which lie outside the category of human wants. Such as

1. The military establishment.

2. Harmful drugs, narcotics and patent medicines.

3. Commercialized vice and crime.

4. Adulteration of food, clothing, housing and other necessities.

5. Speculation and gambling—the institutionalized factor only.

6. Quackery—sure cures, get-rich-quick performers.

7. Super luxuries and their cheap imitation.

8. Fashions—the factor of artificial stimulation only.

9. Commercialized recreation—in part.

10. Professional services—the factor of version only and, as a sort of godfather to them all.

11. Advertising.

"11. Chief source of waste: Unemployment. Such as

1. Seasonal unemployment.

2. Cyclical unemployment (business depressions).

3. Residual unemployment.

4. Turnover losses (changing from job to job).

5. Strikes and lockouts (time lost).

6. Time lost by preventable accidents.

7. Time lost by preventable sickness.

8. Absenteeism (just plain staying home).

9. Lost labor of the idle rich.

10. Lost labor of the hobo and bum.

"11. Chief source of waste: Wastes in technique of production and distribution. Such as

1. Co-ordination failures—lack of knowledge as to requirements, lack of community planning for the physical development of regions and cities.

2. Excess plant capacity, duplication of services.

3. Restriction of output.

4. Commercial failures (bankruptcies).

5. Lack of standardized practices, grades, commodities.

6. Bad internal management—shop scheduling, production standards.

7. Lack of cost systems: research facilities and, in a class by itself.

8. Secret processes, suppressed inventions and, in a class by itself.

9. Wastes in the technique of distribution—excessive selling costs, duplication of wholesale and retail facilities, cross-hauling.

"IV. Chief source of waste: Waste of natural resources.

1. Coal.

2. Water power.

3. Oil.

4. Natural gas.

5. Mineral ores.

6. Timber.

7. The soil.

8. Animal life, including fisheries.

9. Failure to utilize by-products.

## G. E.'s Union Exposed

"Labor Age" has begun a series of articles exposing the company union of the General Electric, by its editor, Louis Francis Budenz. Of interest to readers of the ELECTRICAL WORKERS JOURNAL in particular is Mr. Budenz's attack on the favorable report of Robert Bruere published in the Survey Graphic last spring, and reprinted in part by the ELECTRICAL WORKERS JOURNAL in May, 1926.

Budenz tells how he was present at an underground meeting of 20 General Electric employees.

"But what about Bruere?" he asked. "How did he come to get such a rosy view of this mess?"

"That's easy," the men replied, "He came to the plant with a letter from Mr. Swope, of Schenectady. Immediately the word went round that he was a management man. His talk about sympathy with the trade unions were considered 'nippy-cock.' We all decided to talk favorably of the plan, as that is what the management wants done."

# Like Dobbin, is Steam Locomotive Doomed?

NOT today—not tomorrow perhaps; not in the New Year of 1927, but in the years to come electrical locomotives are said to be going to supersede steam. Not long ago, an old fashioned tug of war was staged between two freight engines, a steam and an electric, and the electric locomotive won. Plans are being hastened to electrify the Pennsylvania between Philadelphia and Washington, the New York Central lines, and the Reading systems, while several large western systems are eyeing the electrified St. Paul with interest.

What a long, long way transportation has come in 100 years! These pictures tell part of the story—a small part of the progress of the railroads.

A hundred years ago the first public railway service was begun in England when George Stevenson's stumpy little "Locomotive L" wheezed down the track, with a man on horseback riding ahead to announce the coming of this sensation. America, always progressive, was not far behind England in welcoming the railroad, and by 1830 had fully 23 miles of railway track. Now it's something like 400,000 miles.

A far cry, too, from the little carriages that bumped over the early iron rails, with passengers eating, sleeping and trying to enjoy the scenery in their cramped positions inside to the present Pullmans, diners, observation cars, marvels of de luxe travel for all the world.

Now a new development in railroading appears, promising a wealth of new possibilities. It is the oil-electric locomotive. The romantic iron steed, who charges through the night breathing fire and steam, is to be replaced, it seems, with a contraption no more exciting-looking than a trolley car!

Though imaginative small boys may mourn the passing of the object of their awe and wonder, engineers present strong claims for the oil-electric type, which is gradually being tried out in the service of several railroads.

## Electric Power Cheaper

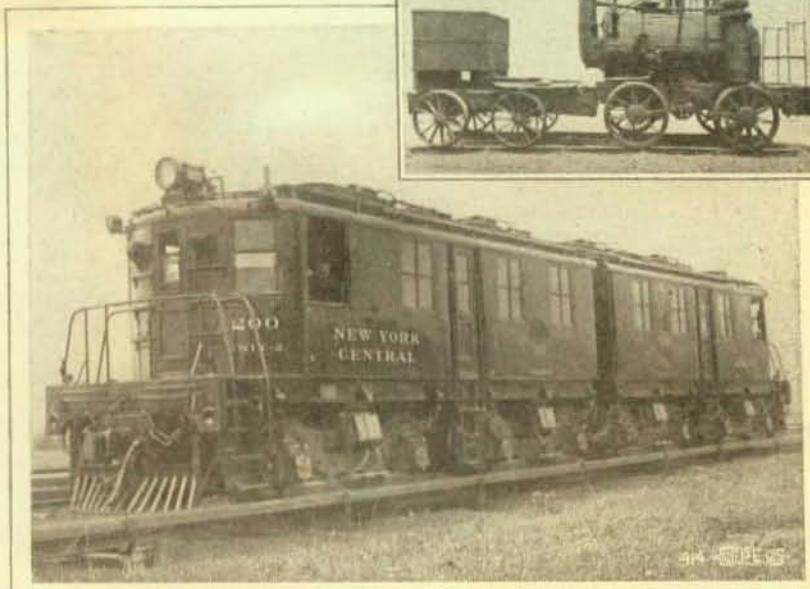
Without a change of equipment, the new product adapts itself more readily to every kind of transportation work, from that of switching to hustling across the continent with a string of freight cars or coaches. Through the use of cheap fuel it operates at a low cost, and the interconnection of electric power systems has made it feasible to supply electric current all along the line. An oil-electric, engineers claim, can make a transcontinental run without stopping for fuel; this would eliminate round houses, water towers, tank cars, tenders, ash heaps, coal dumps, etc., all along the line.

That the insignificant-looking little engine has plenty of power is attested by its growing use in mountain districts. Great Northern is beginning to electrify twenty-four miles of main line on the west slope of the Cascade Mountains, extending from Skyomish to Cascade Tunnel, Washington. E. Marshall, electrical engineer of the road, declared his belief that freight-train time over this section would be shortened an hour and a half, and this over the heaviest grades and curves on the line from St. Paul to Seattle.

The beautiful mountains of Switzerland are soon to be transversed by oil-electric trains. The nation has begun a huge project of electrification, which, by 1928, is expected to give a federal system with 990

This photo shows one of the new oil-electric locomotives now being given their trial on American railroad lines, in service on the New York Central.

Inset shows "Puffing Billy," first successful locomotive run in England, built by Blenkinsop in 1812.



Courtesy of New York Central Lines

miles of electric line, and a further 10-year program is to convert nearly 900 miles more to the new transportation type. This is all being done by the nation itself. Switzerland, so rich in water power from its mountain streams that even the poorest peasant has electric lighting, has not been content to wait for private initiative to develop and exploit her natural resources. Power to run the electric locomotives is developed at two huge stations, having capacity of 90,000 and 48,000 h. p. respectively. At present there is more power available than is needed and much is being sold to factories.

Not only has the oil-electric locomotive helped to make the long, heavy pulls of the mountain grades go more easily, but it has provided an ideal solution for the problem of running through the many tunnels, which the steam locomotives kept always foul and unpleasant with coal smoke.

Electricity, it is said, has revolutionized manufacturing. Now it bids fair to make important changes in another of our primary industries, that of transportation. All the more important that the life-giving "juice" that makes the wheels move shall be controlled not by monopoly, but by the public!

## Labor and the Law

### What is peaceful picketing?

In time of strike how much may members of the striking union contribute to the success of the strike by their presence at the shop entrance and by argument and persuasion, seek to win the sympathy and co-operation of any non-union employees, to cause them to cease work and join the union?

And under what circumstances will the courts step in with an injunction to prevent picketing?

Under an important decision by the Supreme Court of Indiana, peaceful picketing is held to be legal and strikers may talk to non-union employees not only as they go to and from work, but may visit them in their homes to seek to persuade them to stop work and join the strike. Also, by this decision, certain members of the union who sought to intimidate and coerce the non-union employees were enjoined separately but the union was held not responsible for their actions.

Isn't a whole book of legal knowledge like this valuable to every active, working, fighting local union? "The Government and

Labor," this new book by Ellingwood and Coombes, just published by the A. W. Shaw Company, Chicago, offers authoritative outline of labor's relation to the law. There are 630 pages of well-presented information, including surveys of the statutes in the several states dealing with labor problems and disputes, also important court decisions. A careful study is made of the legal aspects of the contract of employment between the employer and the individual employee; the legal status of the labor union and its rights, powers and liabilities; the strike (sympathetic strikes are particularly frowned upon by jurists, yet do you know why?), the boycott, the blacklist, the union label, the lock-out, and other phases of the labor conflict.

Use of the injunction comes in for a thorough study. Regulations dealing with safety and health, hours of labor, wages, workmen's compensation, and social insurance are given full attention in this book.

Although this volume is designed especially for students of labor law, active trade unionists will find it not only important but interesting reading; to business agents especially it should prove useful.

# Theatre Artists Find "The Pay" in Organization

By FRANK GILLMORE, Executive Secretary, Actors' Equity Association

THE general rash of trusts which spread over the face of the country about the end of the Nineteenth Century did not ignore the dramatic theatre. With the formation of the Theatrical Syndicate about 1896 the control of the theatre became vested in the hands of a small group of men, few of whom had any particular consideration for the theatre aside from what profits it could be made to yield.

From that time the lot of the legitimate actors in the United States became increasingly hard. The casual, sporadic and almost accidental abuses to which they had been subjected formerly now became studied and coldly calculated impositions inflicted for the sake of the manager's profits, and because the actors were too weak to resist them.

Many of these abuses were of a technical nature whose unfairness might not be apparent to workers in other lines, but some of them could not but be evident to any reader.

A glaring instance of this tyranny was the amount of free time which the actor was required to donate in the years which followed the rise to power of the Theatrical Syndicate. The theatrical profession, it must be admitted, is and probably always will be something of a gamble. But the managers in the early years of this century wanted the actors to take all of the risk. During the rehearsals of a play no pay was given the actors and these rehearsals might last six to ten weeks in the case of a dramatic play, while for a musical comedy there were not uncommon instances of twelve to sixteen weeks without pay.

And even after they had given all that time there was no certainty of any definite period of employment. The play to which so much had been given might close the first night or any subsequent night without notice, and the actors in it would receive only the pay for the performances played—if that was forthcoming. There was only the law to enforce that payment and the law is a costly and cumbersome thing for migratory workers such as actors. Further, even in those companies in which pay was certain it was quite customary to pay salaries on Tuesday or Wednesday of the week following that in which services were rendered.

There were other practices with which labor, for the most part, never had to contend, but which actors by reason of the peculiar nature of their calling found galling when they were not terrifying.

The possibility always existed that a company might find itself abandoned to its fate hundreds of miles from home or friends, or even the nearest point at which employment might be secured. It was a plight more harrowing than funny to those who experienced it.

## Work Very Uncertain

There was no standard working week. Although custom sanctioned the present six evening and two matinee performances, there were occasions on which actors were required to appear twelve or fourteen times in one week, and for these extra performances they received no extra money. Actors, and especially actresses were forced to provide expensive costumes, the cost of which often exceeded what salaries they received during the run of the play, and which were useless in any other production.

Sometimes the question is asked "What Have Brain Workers to Do With Craftsmen?" Actors have conclusively answered this query with an organization affiliated with the A. F. of L. How, Why, and When of the Actors' Union is told by a moving spirit in that organization.

And finally there was no standard contract in which the actor might know just what was required of him, and to what extent his manager was obligated. The only way of ascertaining where he stood was when he appealed to the courts, and then, almost invariably, he discovered that, through some joker in his contract, thoughtfully inserted by the manager for just that purpose, he had no standing at all in the eyes of the law.

Gradually it became apparent to the actors that only through organization could they hope to present their case to the already highly organized managers. The first medium through which this was tried was the Actors' Society of America, founded in 1896, in which an attempt was made to combine both social and business features. In a very gentlemanly, but not too forceful way, the Actors' Society sought to rectify these great and growing abuses. But the managers saw no necessity for changing their ways, except, perhaps getting a little more hard boiled, and so the membership and morale of the 'Actors' Society slid downhill.

The bottom of the slide was reached about Christmas, 1912. At that time about one hundred representative actors met to determine whether or not there was any life in the old horse. It found there was not, and decided to abandon the Actors' Society of America.

There were, however, about half a dozen men present at that meeting who felt that another organization, centering its attention on the business side of the actors' work exclusively, could yet succeed where the elder society had failed.

During the next six months a series of meetings strengthened this belief, and finally, on May 26, 1913, one hundred and twelve actors met in the Pabst Grand Circle Hotel, and there formally launched the Actors' Equity Association of which Francis Wilson, a great light comedian, was elected first president.

## A Lot of Polite Conversation

But such a move was only a beginning, as they quickly discovered. The managers, organized at the time in the United Managers' Protective Association, were not very much more impressed with this new Actors' Equity Association than they had been with the old Actors' Society of America. And for four years after organization a lot of polite conversation and good humored argument left matters just about where they had begun.

During these negotiations Equity had acquired a larger membership than the

Actors' Society had ever had, and it had also acquired a considerable interest in organized labor, although this sentiment grew slowly and required a good deal of educational work, also.

Recognizing this drift the United Managers' Protective Association, in October, 1917, granted the first request Equity had made, four and a half years before, and consented to the issuance of a standard contract to be issued to all companies under the control of its members.

That looked and sounded like a real victory for Equity. It was an illusion which did not last long. The actors learned in short order that having a contract without the power to enforce its observance meant just exactly nothing.

The presence of that contract, even so, was a source of discomfort to the managers. They did not like to consider the possibilities should the actors realize the potentialities of Equity. And so they, or at least a working majority of them, some time during the winter of 1918-1919, dissolved the United Managers' Protective Association and reunited under the name of the Producing Managers' Association.

## How They Hate Organization

Under this name the same managers who had, as the United Managers' Protective Association, recognized Equity as the representative of the actor, now declined to treat with the actors except as individuals. And, after a few brief days of negotiations the Producing Managers' Association announced its intention of issuing contracts of its own devising, similar to those requested by Equity, save that, shorn of the protection built up in six years by his association, each actor would be compelled, single handed, to fight his battles with the highly organized managers.

But Equity was no longer dependent merely upon its own power. During those negotiations the sentiments of the actors had become crystallized with regard to organized labor, and in July, 1919, the American Federation of Labor had authorized the issuance of a charter to the Associated Actors and Artistes of America, more generally known as the Four A's, of which Equity has been the largest and most influential branch.

With this backing Equity dared to risk the challenge of the Producing Managers' Association. On August 7, 1919, a strike was called against the Producing Manager's Association and its allies. It lasted for thirty days, spread to a dozen cities, involved half a score of labor organizations, and cost everybody concerned in the neighborhood of three million dollars.

In that struggle no one rendered more valuable or more valued assistance to the hard pressed actors than those members of the electrical crafts who belonged to the International Alliance of Theatrical Stage Employees. Simultaneous walkouts of stage hands and musicians closed shows which were manned by members of the company union, the Actors' Fidelity League, or were protected by injunctions, and assured an Equity victory.

The five-year contract which marked the close of that strike embodied all the points for which the strike had been called, and definitely established Equity as the pro-

(Continued on page 50)

# Detroit Fattens Calf For 1927 I. B. E. W. Delegates

**A**LITTLE thrill creeps along the spine of every electrical worker when he hears the words, "Our convention." Already the boys in Detroit are beginning to use these words: good deal, for they have begun to make preparations for this year's gathering; no New Year's message of good will could be more appropriate than this letter sent out from the 1927 convention headquarters:

"Dear Editor:

"No doubt many Brothers and locals have been waiting for some news and information in regard to the 1927 I. B. E. W. Convention, slated for Detroit, so as chairman of publicity of the Joint Convention Committee, I wish to say that we have been holding back until after the convention of the A. F. of L., in order to know definitely just what date ours would be held. Now that is settled. We will get down to the hard work necessary to insure success in the matter of taking care of and entertaining the delegates of the Brotherhood who will be our welcome guests during the convention.

"For the information of the Brotherhood, permit me to say that our committee is composed of representatives of the locals of Detroit and Windsor, Canada, these representatives, in turn being divided into several sub-committees.

"Brother H. E. Watson, business manager of Local No. 58, being general chairman of the committee, and Brother William P. Frost, of Local 17, general secretary of the committee, to whom all communications should be addressed at 55 Adelaide Street, Detroit, relative to business of the joint committee. The personnel of the sub-committees are as follows:

"Entertainment committee — James Barry, Local No. 58, chairman; James Fernie, Local No. 514; H. S. Lenehan, Local No. 17; J. W. Audette, Local No. 58; G. Hope, Local No. 773; R. Clark, Local No. 773; F. Casscia, Local No. 58; John Boyle, Local No. 514.

"Hotel accommodations and railroad transportation — William P. Frost, Local No. 17, chairman; A. Duweke, Local No. 58; James Fernie, Local No. 514; H. S. Lenehan, Local No. 17; E. J. Lyon, Local No. 17.

"Advertising, publicity and donation — Joseph Lyons, Local No. 58, chairman; William Frost, Local No. 17; F. Casscia, Local No. 58; Edward Espinall, Local No. 58; G. Clark, Local No. 773.

"Ways and means — A. Duweke, Local No. 58, chairman; Joseph Basso, Local No. 58; W. Frost, Local No. 17; August Kuhlemeir, Local No. 555; G. Denske, Local No. 514.

"Brothers will please take notice and address all communications in respect to the coming convention to the chairman of the committee interested in care of Brother Frost, secretary.

"The committee on hotels, in company with Brother Bugnizet, International Secretary, have secured the Book-Cadillac Hotel, Detroit's finest hotel, as the official hotel and convention headquarters where the sessions will be held. I am enclosing a picture of the exterior of the hotel.

"President Roy Carruthers, ably assisted by Messrs. Lindholm, Hamilton and Griffin, of the hotel staff, I am sure will do everything conducive to your happiness and com-

fort while you are their guests, for these gentlemen really compel you to feel you are a guest, and not just a customer of this hotel.

"We have set ourselves to make this the grandest and best convention in the history of the Brotherhood, so, locals, wake up and prepare to send delegates, as it will be a pleasure to entertain you all and you Brothers who were at Seattle remember what the Wop said about the nightcap in the morning. Well, that goes; possibly you have read in the public press about the vote of the citizens of that really free country just across the river from us, a few weeks ago. Well, boys, it only costs 10 cents to take a trip to Europe from here. I think you get me, don't you? Anyway you are sure to get the things you want and enjoy the most.

"We have held some wonderful entertainments for the benefit of the convention fund and they have been successful in every way, and you should see the firm of Barry, Casscia & Fernie perform as a committee of hustlers at an entertainment.

"Barry at the bar, Fernie as leader of the orchestra (God save the Kink) and the Wop (Casscia) as producer and protector of the performing chickens.

"I won't try to give you all the news in this letter as I will start 1927 with this one. Expect to write one each month until convention time so I will close with the committee's best wish that all Brothers, their families, and friends enjoy a Merry Christmas, and a Happy and Prosperous New Year.

Building a convention is no mean task. There must be the right balance of entertainment with serious business, and there must be no obscuring of the main goals of the assemblage; accomplishment of much important work. That the Detroit locals are capable of carrying this task to a successful conclusion no one doubts. Despite the unfavorable publicity the city received at the hands of the open-shoppers last fall, when the A. F. of L. met there, everyone knows that Detroit is a beautiful and hospitable city. Electrical Workers will anticipate a convention the equal of any of the memorable ones that went before. JOE LYONS.



BOOK-CADILLAC HOTEL, DETROIT  
Where Electrical Workers Will Gather in 19th Biennial Convention

# Book Brings News of Great Import to Labor

NEWS has been variously defined, but no better definition has ever been invented than "what everybody wants to know and doesn't." And nothing is more interesting to all and any of us than new truths about ourselves—be they, at times, distasteful. And organizations are no different from individuals. And movements from organizations. There has been a dearth of books interpreting American labor to itself. That is why William English Walling's new book "American Labor and American Democracy" is important.

Walling's book is a unique book. It is one of the few books written by an intellectual—which is explanatory, defensive and laudatory of the American Federation of Labor. It is one of the few books written by a man with a large academic background who also has had a first-hand, practical and concrete contact with the labor movement. This latter fact alone makes Walling's book significant. Think of the oceans of books on "Labor Problems" written by dogmatic college professors who never have been inside of a union hall. Think of the rivers of printer's ink spilled by disciples of Adam Smith who think Henry Mencken's caricatures of American labor leaders, and smart lampoons of Greenwich Village artists, are merely photographic truth. Think of the folios of closely argued programs for American labor derived from programs as closely argued by other intellectuals in distant countries. Think of the attacks upon American labor made by brilliant young intellectuals, who out of romantic exuberance find the American Federation of Labor just another Philistine institution at which to chuck a stone.

### Tragic Misunderstanding

The American Federation of Labor is half a century old, and the intellectuals, who with honorable but often misspent zeal have tried to reform it, have never taken the time to understand it. Walling has. We hold that in the field of sociology, as in the field of literary and artistic criticism, there is an obligation imposed upon critics to understand first that which they wish to destroy. And the wilful or blundering misunderstanding of the American labor movement on the part of its would-be friends has been one of the minor tragedies of our national development.

### II

The key to Walling's book is found in this sentence: "Our labor unionism is based not upon ideas, but upon experience." This is not a mere superficial distinction, or a play on words. This measures a deep and fundamental difference between not only practical programs but underlying philosophies. And this accounts for the intellectual's hostility to the American Federation of Labor. By his very nature, the intellectual delights in ideas, ideologies, dialectism, and far-flung philosophies. The only trouble is he becomes enamored with ideas for their own sake; he sees ideas rather than people, things, or social movements; he takes his subjective hopes for objective judgments.

The author of this review has long thought that the same kind of revolution should take place in trade union philosophy as took place in speculative philosophy in

America twenty years ago. At that time William James revolted against the academic dream-building of the Hegelians, who piled thought-fabric upon thought-fabric, ad nauseam, without finding its relation to life. With the Hegelians philosophy was not a tool with which to disengage truth from error, for the sake of practice, but an escape from unpleasant reality. Many critics of the policies of the American Federation of Labor speak out of this same dogmatic idealism.

Experience, as Walling suggests, implies action, practice. And the American Federation of Labor is built for action. It is not a debating society, but a general staff confronted every day with delicate problems of policy, that must be solved rightly or wrongly. A mistake is not merely a wrong judgment—as it is in the case of the intellectual—it is a criminal error carrying heavy consequences to thousands and thousands of workers.

This, then, is Walling's point of view, and with this established, he interprets hopefully American labor's political, social and economic progress.

### III

Contrary to belief, the A. F. of L.'s non-partisan political policy has been a success; not only in defeating tons of pernicious legislation, but in practical accomplishment; not only in concrete accomplishment, but in working a counter-revolution in the administration of American government.

Tories were intent on nullifying the work of congress. A concerted publicity effort was made—and is still being made—to belittle congress. Organized labor fought to prevent the setting up of a virtual dictatorship through greatly amplified executive powers, by electing labor men in all parties to represent the public, and not corporations, in congress. When labor did this, it introduced the bloc system of government into the United States, which is government by economic groups, penetrating through the old political forms:

"Yes, we shall have government by bloc. But what is new about that in this country? The only novelty for the United States is this, that we shall have bi-partisan government by economic organizations of labor, agriculture and other popular producing groups, instead of the present bi-partisan government by business organizations.

"President Coolidge and Vice President Dawes denounce the bloc system as representing 'organized minorities.' General Dawes speaks of the cowardice of congress before 'the organized minorities of the soldier bloc, the farm bloc, the labor bloc, the maternity bloc, the good roads bloc.' But the largest and most stable of these organized minorities, the farm organization and organized labor, when acting together, represent a majority of the population. And rule by a majority composed of two or more organized minorities of this type—its composition changing from time to time, so as to bring into the government in the long run all the most important groups of producers—would provide the most solid possible foundation for efficient, representative, and progressive government."

William English Walling's new book, "American Labor and American Democracy," heartily recommended to every trade unionist by this Journal, is published by Harper & Brothers, New York City. The price is \$3. It is also published in paper by the Workers' Education Bureau at \$1.

### IV

This book of Walling's is rich and suggestive. It is impossible to touch on all its varied matter, but what he says about wages, and labor banking and labor business is salient. He considers restriction of immigration as labor's greatest legislative triumph, but it brought consequences.

"But now that immigration is practically suspended, the individual wage-earning employee will be able to advance himself, as a rule, only by the advance of his employment—a method of advance facilitated, however, by this same restriction of immigration. This means, of course, a wholly new outlook and new mentality for American labor. And the fact that wage earners must now elevate themselves, mainly, as a group and not as individuals, gives a wholly new importance to the labor unions which are organizing that group.

"Labor is now beginning to receive a slightly increased proportion of our new wealth, then, not through the natural working of our economic system, but because of its own organization and the political power which (with the aid of certain other groups) brought about and maintains the restriction of immigration."

He does not believe that labor is yet getting the full share of profit distribution.

"Those who own and control industry, and the higher salaried and professional employees closely associated with them, are receiving the lion's share of the per capita rise in the national income. That share is considerably greater than the 28 per cent increase per decade in the productivity of industry as a whole, since labor is taking out of this only a 17½ per cent increase."

Turning to the much-mooted question—"Is American labor becoming capitalistic?" he answers directly:

"Labor regards the labor banks as a mobilization of the capital of wage-earners—a mobilization of capital corresponding to the mobilization of labor in the unions. The unions control both—and they are no more ready to allow their money to be used for purely capitalist objects than they would be to allow their mobilization of the labor supply to be used for such purposes."

And again, "American labor regards organized labor as the chief of the democratic forces preventing full establishment of capitalism." Further, according to Walling,

"American labor aims to check the development of capitalism and to further the development of industrial democracy. But it does not aim to abolish capitalists or privately owned capital. On the contrary, it recognizes the value of the constructive type of capitalist today, and when the menace of capitalism shall have passed, it believes that 'captains of industry,' having ceased to be industrial generalissimos and financial dictators, will function far more effectively than they do today."

### V

And the ultimate goal? Industrial democracy, within great industrial corporations, maintained by a government democratically representing great economic groups;—no mean picture, no backward-turning picture, no terrifying picture; a picture that suggests the need of strengthening labor unionism everywhere, and a call to youth for brave, self-denying work.

An important book this, and one that should draw new fire from critics of American labor, as well as one that should disarm many opponents and claim them to new endeavor in behalf of the greatest adventure of our generation.

Alaskan grasses found growing in Colorado mountains are believed to have been originally brought down by glaciers in the ice age.

# Power Projects Slated for Early Construction

The Electrical World, a leading publication of the electrical industry, lists the following projects as among the major power developments throughout the United States:

## POWER PROJECTS

**GEORGIA**, Augusta: Permission to undertake hydro project on Savannah River, 21 miles above Augusta, to cost \$20,000,000 and to be completed in 1930, sought from Federal Power Commission by Savannah River Electric, a subsidiary of Southeastern Power and Light. Program includes construction of power plant and dam on Savannah River, high tension lines to Atlanta, Charleston and Macon, and interconnection of these lines with those of Georgia Railway and Power. Dam to be of solid concrete, 90 feet high; plant ultimately to be equipped with four 30,000 horsepower units.

**WEST VIRGINIA**: West Virginia Power has applied to Federal Power Commission for license covering project on New River just below Bluestone River, where company plans to install 125,000 horsepower.

**WASHINGTON**, Seattle: Authority granted by Federal Power Commission to city of Seattle to make surveys for three dams between Canadian border and present power house and dam at Gorge Creek. Skagit River project is proposed to be developed as far as northern border of Washington and ultimate development, is estimated, will cost \$55,000,000 and yield between \$40,000 horsepower and 1,000,000 horsepower by about 1950.

**NEBRASKA**: Representatives of Nebraska electric power companies will make an early visit to scene of proposed Tri-County Irrigation project in central Nebraska to estimate possibilities as producer of electric energy. Government aid being asked for project and favorable congressional action expected. Project includes development of two power sites in Gosper County and generation of large amount of energy.

**CANADA**, Ottawa: Reported that Canadian International Paper Company is planning development of 40,000 horsepower at Mountain Falls on Red River about 50 miles below city of Ottawa. Plan calls for dam 120 feet high and 200 feet in width.

**CALIFORNIA**, Sacramento: C. G. Specht, claiming to represent California capitalists, filed application with State Division of Water Rights for appropriation of 510 second feet of water from North Fork of Trinity River. Proposes to build dam of loose-rock construction, 400 feet high, 1,600 feet long on top and 100 feet at bottom; 100,000 theoretical horsepower involved.

**NEW YORK**, Elmira: Elmira Water, Light and Railroad program of expansion for coming 12 months includes additional 6,000 kilowatt turbo generator in Riverside power house, new boiler to burn pulverized fuel, and incidental equipment. Company intends to build 110,000-volt, double-circuit, steel-tower transmission line from Elmira about 68 miles north to connect with lines from Niagara Falls. A 10,000 kilowatt substation at Elmira also part of program, which is to be financed by \$2,000,000 bond issue.

**VIRGINIA**: Large new developments in 1927 will include: Project of Appalachian Electric Power Company near Pulaski on New River, where dam and hydro plant will be built to develop 85,000 kilowatts; Virginia Electric and Power, operated by Stone & Webster, plans to expend large sum on power development in Virginia in next few years, including \$5,000,000 steam plant at Norfolk and high tension line to reach almost entire length of state to connect important hydro development at Roanoke Rapids with holdings of corporation at Fredericksburg.

**CANADA**: British Columbia Electric Railway will begin work this winter on projected \$12,000,000 hydro plant at Bridge River with expectation of developing 50,000 horsepower in two years and then doubling that amount.

**CALIFORNIA**: Construction of two hydro plants on Middle Fork of American River with total capacity of 50,000 horsepower, to cost \$8,250,000, begun by American River Water and Power Company of San Francisco. Plans include 200-foot dam, tunnels and power plants. Final surveys will be completed in spring and construction expected to be under way by fall of 1927.

**PENNSYLVANIA**: American Electric Power of Philadelphia, which controls Wilmington and Philadelphia Traction, has obtained permission to build 66,000-volt transmission line from state line of Pennsylvania to Wilmington, Del., a distance of about 28 miles, at a cost of approximately \$1,000,000.

**CALIFORNIA**: Application for permit to divert 50,000 acre-feet of water per year from Chowchilla River and a like amount from Fresno River has been filed in State Division of Water Rights at Sacramento by Webb & Shelter, of Le Grand. Water will be used for electric power and irrigation. Generation of 85,228 theoretical horsepower will result for erection of dam costing \$400,000, application states.

**MARYLAND**: Definite plans to develop hydro-electric power at Great Falls on the Potomac, 15 miles above Washington, D. C., have been presented to members of congress by E. H. Rollins & Sons, New York bankers, according to the Baltimore Sun. Bankers are said to be willing to build and operate the plant and supply all machinery if the govern-

ment will build the dam. This would reduce from \$45,000,000 to \$30,000,000 the cost to the government of harnessing the falls. There is now a bill before congress sponsored by Representatives Zihlman, of Maryland, and Moore, of Virginia, both of which states, it is said, would benefit by the development.

**IDAHO**: Application made to Idaho Public Utilities Commission by Payette River Power, asking permission to construct power plant on South Fork of Payette River with transmission system extending far into interior of state, one line connecting with system of Salmon City Light and Power at Salmon City, and another line running north from Payette and serving mining district. Dam is to be 175 feet high and 300 feet long; installation of 3,100 kw planned at a cost of \$1,100,000.

## COMBINED EARNING POWER OF AMERICAN PEOPLE STAGGERS HUMAN IMAGINATION

By C. L. NOYES, Assistant Manager Union Cooperative Insurance Co.

Occasionally we are startled by a news item which has back of the cold statistical facts a very important relation to our own lives, and it makes us think a little—not of Tim Smith down the street or of Tom Clark across the way, but of us, ourselves.

For example, a recent item from New York stated that a value of \$1,500,000,000,000 (one trillion five hundred billion dollars) has been placed on the *people* of the United States, the figures being based on earning power.

These figures are not meant to show what wealth has been accumulated, but how much the man himself is worth, brain and brawn, as distinct from the material things which can be stored up.

This is about *five times* the value placed on *all material assets*, including buildings, land, railroads, livestock, etc.

The earning power of the unionists, in the present economic situation of the United States, is so substantial that it is enough to make one stop and think how many of these billions of dollars represent the money value of the workers.

Pennsylvania is one of our greatest industrial states. Income tax statistics show it to be next to New York in the number of returns filed, the size of the incomes, and the amounts paid to the government for internal revenue, based on 1923-1924 figures.

Even in Pennsylvania, however, statistics show that 23 per cent of the average estate left by persons dying there is used to meet funeral expenses.

Think of it! Funeral expenses alone eat up 23 per cent of the average estate. Then think of this! Only 77 per cent of the average estate is left for any other expenses, and to provide for the future of the family!

The population of the United States in 1925 was 113,493,720—not just millions, but millions of men, women and children.

Figures of life insurance companies, including not only old line legal reserve but also assessment and fraternal insurance, show that there was life insurance in force at the end of 1925 in the amount of \$82,154,960, 269. More staggering amounts, all in dollars!

Taking these dollars of life insurance, however, and dividing them by the number of men, women and children, we find a per capita amount of life insurance of only \$723.

In 1910, the amount of life insurance per person is said to have been only \$176, so that we are sure that the movement is in the right direction.

Surely men and women are learning more and more about life insurance, and its possibilities for protection. But coming back to the Pennsylvania situation, where 23 per cent of the average estate is paid merely for funeral expenses, how much would the 77 per cent left for the dependents amount to in the way of protection?

Average life insurance policy, only \$723.

Average funeral expenses, 23 per cent, only \$166.29.

Average left for dependents, 77 per cent, only \$556.71.

And nowadays a funeral at \$166 is not much of a funeral, for the high cost of dying has kept pace with the high cost of living.

Saving by means of saving is a solid and substantial way of getting ahead, and is important for every one. Saving this way is a slow process, however substantial it may be, and in this day of fast moving we need to supplement straight savings by some quicker method.

Putting money in the bank in the good old-fashioned way is fine. You see your money in your bank book. You know it is safe, and you can see it grow, not only by means of more savings but also by the accumulation of interest. In time, you will have reached the goal you set when you began to save.

But suppose—just suppose, of course—one day, something, anything, stopped you from carrying out your well-laid plans. Those who were left would find evidence of your thoughtfulness in the bank account, but it would be a meagre amount to depend on, merely because you had been unable to complete your plan.

On the other hand, you put part of your money in the bank, and deposit part with a life insurance company, and now you are more confident of reaching your goal of protection. You pay the money, you know it is safe, you can see the cash and loan values grow, and all the time you know that by merely co-operating with many other policy-holders, you have provided certain and sure protection for your loved ones in case of need.

No more of this inadequate protection, indicated by the average insurance of \$723, no more of these \$166 funerals eating up 23 per cent of the average estate, no more worry about future protection: because the average worker is waking up to the fact that his family is an average family, and will need average protection, and he with

(Continued on page 53)

# Wire-Patcher's Wife Croons Vivid Bedtime Tale

By a Wire-Patcher's Wife

**C**HILDREN, do you remember asking me about an old gentleman that you saw passing our house today, the one that was mumbling to himself? For tonight's bed-time story I will tell you of him.

Once upon a time, at least four years ago, this bent and broken old man was not as you saw him today, but upright, care-free and with a light in his eye that only a \$500.00 bank balance will give.

Just think children, this man was a cottage-hopper, a wire-patcher, or I believe that in these changed times you young folks would call him an Electrical Engineer, (but Mrs. Smith said he called himself a wire-patcher). He was getting nine, ten or eleven dollars a day, and twice the usual rate if he worked a little extra. Let's see, say he makes \$10.00 in one day—(I understand they work five and one-half days a week— $5\frac{1}{2} \times 10$  is fifty-five dollars in one week, and counting four weeks a month,  $4 \times 55$  is \$220 a month, not counting the extra days). Sh-h-h Bobby, it doesn't matter if Mrs. Smith did say he didn't work most of the winter, I'm sure if your poor papa made that much in one month we could have a new car, and I could have a fur coat and well—if he made that much money a month through spring, summer and fall then we wouldn't worry about winter. (I wonder if papa couldn't learn that work from one of those corresponding schools, and make \$10.00 a day?) Yes, Bobby, I'll stop talking about the money, but I was only trying to show you how well off he was. Children—it was the radio that turned that once so carefree wire-patcher into that forlorn old man.

First he made a crystal set. He had to buy a head-set and a galena crystal, (that's the little bright stone that your papa used to tickle with the cat's-whisker on our old radio). The cigar box that had been the sewing chest was utilized for a cabinet and the rest of the set was made from odds and ends "off the job." After he had broken only one leg endeavoring to put up a small antenna and connecting the new little radio he could hear the local broadcasting station sending out its beautiful music, or stock market reports.

This wire-patcher was a happy man then—wait my children, the tale is just starting—as I was going to say before Bobby started to leave, this man was happy until he visited a brother-in-law who had an entirely different radio. This radio was called a peanut; it had one little electric light, or tube, and wires and such inside its box were arranged in a different way from the little crystal set. From this "peanut" radio you could almost hear a station about fifty miles away.

Winter was upon him, a season of dark nights and gloomy days. His wife took their bank balance of \$500.00 and went to spend the winter with her folks in California.

Spring came though, as it often does, and with the first chance of being "on a job" he started an accumulation of wire and things and soon had a "peanut." Because the set had the coil points, or something, all shined up he could hear a station seventy miles away. He stopped the canned-heat habit, because it interfered with his tuning.

But again there came dark nights and sleepless days. A neighbor had a three tube set. He could get the State Normal

**Wives, here's a story that will tickle your ribs with laughter. Husbands, here's a tale that will make you creep away to the lonely attic to smoke your old clay pipes. Children, here's a yarn that will while away the half hour between sleep and waking.**

School and the Flour Association and Chicago occasionally. Things looked bad for a while, but spring broke early that year, so it wasn't long until he had a three tube set. It was such a joy that he decided that

four or even five tubes would be better. After a while he must have had fourteen or fifteen tubes with plenty of parts for each, strung out over the 9 x 12 apartment, just wherever they would make the prettiest light, I suppose.

At last he was completely happy, there was always something that could be added. He was staying up 'til 4 a. m. thinking to get 2 LO. Then came his fall. He was told he could get EAJ7 and JIBK, as well as 2 LO, just by a turn of the dial of this new Super-pluper Woofledyne.

The old radio was scattered to the four winds. On the new Super-pluper Woofledyne there is nothing he can add, but he almost regains his lost self when he gets Chicago, occasionally.

Pueblo, Colo.

## TRADE UNIONISTS OR STRIKEBREAKERS! WHICH? PIONEER YOUTH GIVES POSITIVE ANSWER

By THOMAS J. CURTIS, President, Pioneer Youth of America. President, Subway & Tunnel Constructors' Union. Vice President, New York State Federation of Labor

A million young workers enter industry each year. Do they understand the American labor movement? Will they affiliate with organized labor and help better conditions for themselves and fellow workers?

Or

Will they be opposed to organized labor—suspicious because of the open shop propaganda which is reaching them as chil'dren, or worse yet, will they act as scabs in time of strike?

Approximately 24,885,650 children are now studying. In ten years most of them will be absorbed in industry. Meanwhile they are growing up in an anti-labor atmosphere. They learn that labor consists of "agitators" and "foreigners"—that labor is "against the government" or is "un-American." In many cities they are influenced by "Junior Chambers of Commerce," and on all occasions are reached by insidious anti-labor propaganda, through the movies, the press, and even in the public schools.

They learn nothing of the real meaning of the shorter work day or a higher standard of living—of our efforts to abolish child labor, poverty and exploitation; of our efforts to bring democracy and social justice into industry; or of the self-respect and manhood that are gained with organization.

Is it any wonder that they do not understand?

In an effort to acquaint our children with these truths, and to prepare them to take their place in the Labor Movement, we have formed a new children's organization, conducting clubs and summer camps, known as Pioneer Youth of America. Many labor organizations support this movement, and leading progressive educators are helping in developing its program.

Briefly stated, the purpose of Pioneer Youth of America is to help our children to learn to think clearly, to understand social and industrial conditions and the problems that face us today; to develop a sense of social responsibility, and prepare them to take part in labor's effort to attain a happier and freer life. Naturally, this movement is interested in developing the

children's health, a self-reliant spirit and good character.

Pioneer Youth represents the extension of the principle of workers' education to the children and young people in our midst. We feel without opposing any other children's organizations that just as it has been found necessary to develop our own workers' education movement—regardless of other adult educational facilities—so now we must form our own organization for the development of the children and young people.

We are reaching thousands of children and young people in New York, Pennsylvania, and elsewhere through our summer camps and clubs. Your interest will enable us to reach many more—and to do better work.

Trade unionists can help by interesting fellow trade unionists; bringing children into the movement; and becoming dues paying members of the adult section of Pioneer Youth.

Labor unions that have endorsed the work, made contributions, or sent delegates to Pioneer Youth Conferences, now number 148. Among their supporters are twelve International Unions; namely, the American Federation of Teachers, International Association of Machinists, International Brotherhood of Firemen & Oilers, International Fur Workers, Brotherhood of Pulp, Sulphite & Paper Mill Workers, International Ladies' Garment Workers, Sunway and Tunnel Constructors, International Union of Cloth Hat, Cap and Millinery Workers, Glass Bottle Blowers Association of United States and Canada, International Union of Pavers and Rammermen, Brotherhood of Railway and Steamship Clerks and the United Textile Workers of America.

Eighteen city central bodies, district councils and state federations, 117 local unions, the National Women's Trade Union League, and a number of women's trade union auxiliaries have also endorsed the movement. The national headquarters of Pioneer Youth are at 3 West 16th Street, New York City. Secretary Joshua Lieberman will be glad to answer inquiries bearing on the movement and its possibilities.

# Senator Wheeler Says Valuation Hits Wages

By ELIOT HARRIS

"I DON'T know what the Supreme Court will do on valuation," said Senator Wheeler when asked to make a forecast. "I do know what the American people would do, if they could be told the truth about it. They would say that the railroads are entitled to a fair return on every dollar honestly and prudently invested in the property—and that they are not entitled to anything more."

"This scheme to value the railroads at somebody's guess as to what it would cost to reproduce them is the biggest swindle in the country. It has a direct, and most important, bearing on railroad rates and wages."

"How is valuation going to affect railroad wages, Senator?"

"In this way: There are two payrolls on every railroad. One is the payroll of money—interest on bonds and dividends on stocks. One is the payroll of men—wages and salaries.

"The railroads are trying to pad the money payroll. Where one dollar was invested in the property, they are trying to get what they call a fair return on two dollars, and in some cases even more. If you padded the payroll of men—if you paid wages to two or three men where only one was working—there wouldn't be any wages left for money. If you pad the money payroll, there isn't going to be enough left for the men. It works both ways."

"I suppose the railroads of this country actually cost about fifteen billion dollars," Woodlock admitted when we had him before Senate committee that the carriers' scheme of "valuation" would give the railroads a valuation of around thirty-three billion dollars; and according to the Transportation Act, the Interstate Commerce Commission will have to fix freight and passenger rates high enough to pay a fair return on that sum.

"I expect they've got a still higher figure by this time."

"They have, Senator," suggested the interviewer. "The Wall Street Journal says that it would cost fifty-five billion dollars to reproduce the railroads of the United States, and that they are worth that sum."

"Whe-ew;" Senator Wheeler whistled. "I knew they were boosting the ante, but I didn't think they were going quite that fast. They've added several billions while I was out in the mountains on vacation! I wish my property would grow that fast."

"But doesn't that show what I was saying a few minutes ago? This valuation boost hits the railroad worker a double wallop. It hits him first as a consumer, just as it does everyone else, but then it gets in a special punch on his wages. If this valuation swindle goes through, the railroad worker will get it in the neck, going and coming."

## Padding Capital's Payroll

"This country is pretty rich; but it isn't rich enough to stand any such padding of the money payroll as that. If it pays wages in the shape of interest and dividends on billions that never were invested, it can't pay decent wages to the men who are running the railroads."

"But, Senator, do you think the railroads expect to get rates based on such a valuation?"

"Not right away, no. It would break the country, and railroad operators know it."

But here are the things that such a valuation will do:

"As population grows and the volume of traffic increases, operating costs on railroads go down in proportion to the income, and normally, it would be possible to either reduce freight rates, or increase wages, or both."

"But suppose the Interstate Commerce Commission or the Supreme Court fixes a valuation of say \$35,000,000,000—let alone this new figure of the Wall Street Journal.

"Then, when you try to reduce rates, the railroads come in and say: 'We aren't earning a fair return now on the value of our property. We didn't fix that value. The commission did it, or the court did it; but the law says we are entitled to a fair return on it.'

"What's the answer? There isn't any. Let this fake valuation go through, and you never can reduce rates. The railroads will have a complete excuse, not only for fighting reductions, but for demanding increases if the country gets prosperous enough to stand the extra strain."

"And it would work the same way on wages?"

"It can't help working the same way. Right now, when any railroad workers ask an increase, the first answer the company makes is that it isn't earning a fair return on the value of its property. Double the valuation of that property, and give an official certificate of that boosted price, and how will the workers get by it?"

"I don't know," said the interviewer.

"Neither does anybody else," retorted the Senator.

"In my judgment," he went on, after a moment, "the only way you can keep prosperity is by increasing wages just as fast as increased production will permit. Unless that is done, production gets ahead of consumption, the markets are glutted, and everything stops."

"But this valuation deal which the railroads are trying to put across will make it impossible to raise wages in an industry that employs over 2,000,000 men."

"If that doesn't mean trouble, then I don't know the signs. And I ought to know them," he added, with a grin which reminded the interviewer that this is the United States Senator whom the "Ohio gang" tried to ruin by deliberate perjury.

"But what is to be done about it?" asked the interviewer.

"Take it to the people," was the instant answer. "They'll settle it, and settle it right, if you can get it to them in time."

"The newspapers aren't carrying the facts about this business. I don't think one newspaper man in ten knows what it means. But the railroad workers know—or ought to know. An unfair valuation hits them both ways. It gets them as consumers, through high freight rates added to the cost of everything they buy, and it gets them as producers, by keeping down the price of the labor which is all they have to sell."

"Wall Street is padding the money payroll of the railroads. Every railroad worker should load up on valuation facts, and preach them to all his neighbors."

"No one wants to deprive the roads of a single dollar actually and honestly invested. They should get a fair return on every cent of actual investment, and when there is room for reasonable doubt, I am in favor of giving the railroads the benefit of that doubt."

"But this trick of saying that where a railroad has invested ten million dollars, it is entitled to a return on thirty million, because some one guesses that it would cost thirty million to reproduce the property now—that is so manifestly unfair that it ought to be stopped, and railroad workers have a mighty good reason for assisting in stopping it."

## WORKERS' BUREAU MAKES ELECTRICAL STUDY

"Economic and social changes are too frequently studied after the event and thus allowed to come about almost without guidance. In their wake are discovered good and bad, side by side—many results which have proved most regrettable and many which might easily have been prevented had we but used foresight. It does not require much imagination to realize that we are on the threshold of an electrical age. While of course a great deal that can perhaps be properly called progress has already been effected by electricity—especially in the field of industry—the great changes to be wrought by it in our social and economic life appear to be still ahead of us. They will be due largely to two relatively recent factors in electrical development, first the rapidly declining cost of electric current—and second, the fact that electricity in the near future will be practically everywhere available and in unlimited quantity."

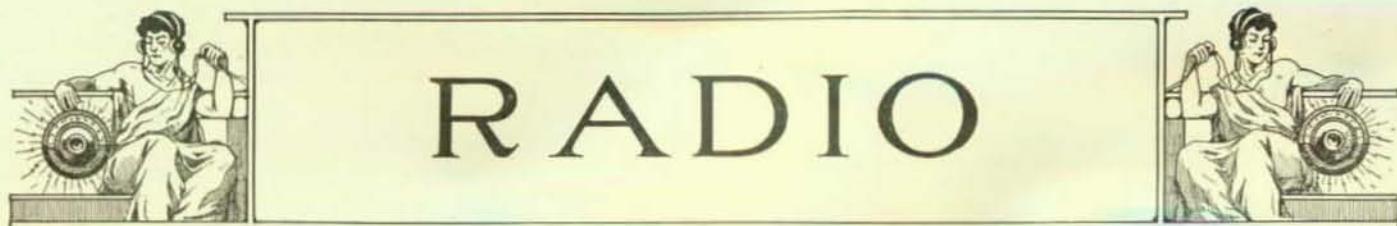
Such is the statement of Morris L. Cooke, distinguished consulting engineer of Philadelphia and an authority on giant power, in his preface to "Electricity in the Home," a project in co-operative research in connection with the social use of electric power," conducted by the Workers' Education Bureau under the direction of Mr. Cooke. The find-

ings of this survey are about to be published by the Workers' Education Bureau Press.

"Electricity in the Home," as its title may suggest, is an inquiry into the use of electrical labor-saving devices. An exhaustive study has been made from hundreds of sources, in periodicals, books, articles, etc., to determine, if possible, the extent of the use of electrical appliances in homes in the U. S.; their cost, the amount of electricity consumed for household processes, electric rates and their relation to number of customers and number of appliances used and the important question: *relation between the cost of living and the cost of electric service.*

This book deserves its place on the electrical worker's reference shelf. For although the I. B. E. W. is not directly concerned in the field of manufacturing electrical appliances electrical workers like to follow Lady Electricity into the various fields of her activities; and every home has a woman in it who uses, or would like to use, electric power to conquer the drudgery of housework.

A new war-time device is a listening machine by which approaching airplanes can be detected 12 miles away.



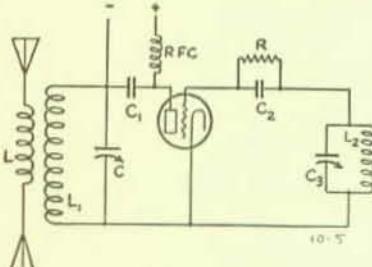
## RUNNING STORY OF RECENT RADIO ADVANCES

Edited by JOHN C. CLAYTON

It is convenient to rate the power of a transmitting tube in terms of the INPUT to the tube measured under normal operating conditions. The output power of the tube depends upon so many factors, that this system is rarely used.

With direct current on the plate of the tube, the power INPUT to the plate of the tube is equal to the plate voltage multiplied by the plate current. If you are using a UX210 tube with 400 volts on the plate, and the plate current is 50 milliamperes (.05), the power INPUT will be  $400 \times .05$  or 20. The result is in watts. In like manner, if you are using a 203-A "50 watt" transmitting tube, and the plate voltage is 1500 and at the moment of measuring, the plate current was 125 milliamperes (.125), the INPUT in watts would be  $1500 \times .125$  or 185 $\frac{1}{2}$  watts.

When purchasing a plate transformer, then, care must be taken to see that the rating in WATTS is always more than the INPUT in watts to the tubes you will be using. The normal input to any of the transmitting tubes on the market can be figured readily by multiplying the normal plate voltage by the normal plate current



(FIG. 1)

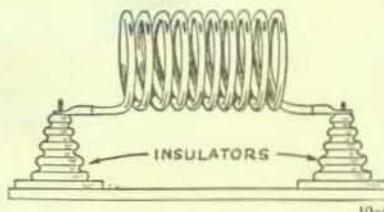
(in fractions of an ampere). This data is readily obtainable from the catalogs. To this a factor of 25 per cent should be allowed as tubes can be operated in excess to their normal input without serious consequences. The result yields a figure in watts, giving some idea of the magnitude of a plate transformer required to give plate voltage for this particular tube. In no case should the plate transformer have a lower rating than that produced by the above simple arithmetic.

As an example, the "7 $\frac{1}{2}$  watt" UX 210 is rated at a plate voltage of 350 with a plate current of .045 ampere (45 milliamperes). The normal input to this tube, is  $350 \times .045$  or 14.75 watts. Adding 25 per cent to this figure we find that the result is 18.5 watts. The plate transformer for a single 210, then, should have a rating of at least 18.5 watts. Please understand that the rating of a transformer has nothing to do with its plate voltage. A transformer might have a rating of 10 kilowatts (10,000 watts) and still have a secondary voltage of only 350 volts.

If two tubes are to be used, the plate voltage remains the same but the plate current is doubled. If three are to be used, the plate voltage remains the same but the plate current is tripled, and so on.

### A Good Transmitting Circuit

One of the oldest forms of receiving circuits is that used by Armstrong and called

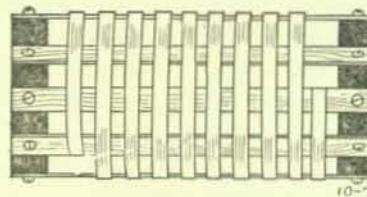


(FIG. 2)

the tuned-grid tuned-plate circuit. A diagram of this circuit appears in Fig. 1. More lately it has been brought into use as a transmitting circuit and has proved very popular. It has a number of advantages which justify its use for short waves, and it has turned out to be a very excellent transmitting circuit for wavelengths in the amateur bands.

In this circuit the grid and plate are tuned to the wavelength you desire to work on, and the coils in grid and plate circuit are not coupled to each other, the feedback being furnished through the grid-plate capacity of the tube. As the wavelength becomes shorter and shorter the tube capacity offers less and less opposition to the flow of current through the tube, and the circuit works better and better. For 80, 40 and 20 meter transmission this circuit is rapidly coming to the lead.

Condenser C3 and coil L2, in the grid circuit, are so proportioned that the wavelength of the combination is that desired. Also coil L1 and condenser C in the plate circuit are proportioned likewise. Both



(FIG. 3)

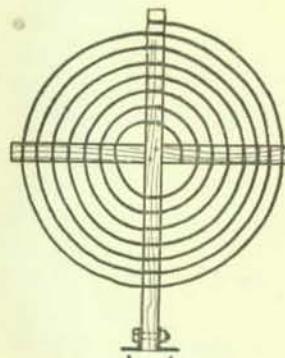
condensers C and C3 should have a fairly high capacity (around .0005 mfd.) since the stability of the circuit is materially increased, and the note of the signal is much steadier, with a relatively high capacity in grid and plate circuits. Condenser C1 is the plate blocking condenser, used to prevent short-circuiting of the high volt-

age supply connected between the "plus" and "minus" indicated in the diagram. This condenser should have a relatively small capacity. A fixed one of about .00001 mfd. will usually be correct. This condenser must be insulated to withstand twice the full plate voltage. Condenser C2 is the grid condenser which should have a capacity of about .00001 mfd., and R is the grid leak, having a resistance of from 2,500 to 10,000 ohms, depending upon the type and number of transmitting tubes.

This circuit is identical with the one which was used on the Byrd Arctic Expedition's short wave transmitter, and is in use at a large number of amateur stations through this and other countries.

### Types of Transmitting Inductances

A very satisfactory transmitting inductance can be made from quarter inch copper tubing which is coiled into a solenoidal type, having the turns spaced by a distance



(FIG. 4)

of approximately one-quarter inch. Coils for the tuned-grid tuned-plate circuit described above should have an inside diameter of two inches. The copper tube type of inductance can be used in any transmitting circuit, however.

In making these coils a fairly heavy vise and a piece of two-inch iron pipe about a foot long are required. The copper tube is hooked through a hole in the pipe and then the pipe (and the end of the tube) is clamped in the vise. The required number of turns are wound on the pipe, care being taken to draw the turns as tight as possible and to keep one turn up close to the next one.

After the coil has been wound on the pipe, the copper tubing is cut four or five inches from the end of the coil, and a pair of heavy pliers are used to hold the end of the coil. It is then twisted (in the same direction as the turns are put on) until the tubing is tight. The starting end of the coil is then sawed off, near the pipe, and

(Continued on page 50)

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to the  
Cause



of  
Organized  
Labor

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No. 1

**Man's Friend to the Last** Across a narrow, deep pass in the Alaskan hills, 40 miles from the nearest shelter,

two miners were at work. Suddenly there was an explosion and both lay painfully wounded upon the snow. One, calling a dog, scribbled these words upon a dirty scrap of paper, "Come! Both seriously injured. Explosion." It was 40 degrees below zero, bleak, dark, solitary, yet that dog of the wild Alaskan breed made his way back over the hills and won aid for the injured men. \* \* \* This incident of the holidays invites us anew to consider man's most faithful friend among the animals. A dog asks only a bone, and he shares the lot of his master, grimly or gayly whatever it may be. Unlike humans, he never fawns before he bites, and gives warning of attack. He never talks back. He is patient, loyal and comradely. In a world of human perfidy and habitual double-crossing, it is good to think of one's dog. He makes us all just a little more humble, and just a little less sure that man is the crown of creation.

**Bell Supreme Over All** The people of New England are once more being treated to the curt, buccaneering policies of the American Telephone

and Telegraph Company. That two-billion-dollar, unregulated colossus, with the righteous pretense of being a good citizen, has just defied the state Department of Public Utilities of Massachusetts and flatly refused to obey its ruling. The American Telephone and Telegraph Company, owner of the Bell System, a nation-wide monopoly, evidently thinks that laws are to be kept only when it suits its convenience.

Statler is building a hotel in Boston. Statler believes in playing fair with labor. Statler's job is all-union. Union electrical workers asked that installation of telephones in the new Statler also be done by union labor. Statler said "yes"; Mother Bell said "no." The dispute was finally taken to the state Department of Public Utilities which directed sour old Mother Bell to connect their service to the work installed by members of Local Union 103 of this Brotherhood for the Statler Hotel. In her zeal for having her own way, Mother Bell not only refused to obey the state ruling but at once took steps to hold up to ridicule, to negate and to nullify, and even, in effect to seek to abolish the department. Mother Bell now asks the Supreme Court of Massachusetts to determine the right of the Department of Public Utilities to require the company to give service to the Statler Hotel in the manner Mr. Statler wishes.

This of course is a fight to the death. It means that the telephone trust is out to get the state governing body. If the highest court rules in favor of the corporation, the people of Massachusetts might as well abolish the department, for if the department may rule only on questions that please the corporations and never on questions that displease them, it might as well cease.

This new manifestation of the imperial might of the telephone monopoly will not sweeten the already sour public sentiment in the company's favor. A storm is rising over New England against the unregulated, high-handed telephone trust. Some day it will break. Perhaps this newest act of defiance of Mother Bell will bring the cloudburst.

**Court-Made National Policies** A justice of the U. S. Supreme Court is quoted as describing the highest tribunal as a national policy-making body. If this be the case—and in effect the decisions of the Supreme Court act as determinants of national policies—it is proper and reasonable that these policies be carefully scanned and weighed by their effect upon the nation.

Two decisions have been recently handed down of immediate interest to labor. The first, known as the Brims case, finds members of the carpenters' union guilty of violating anti-trust laws. Chicago carpenters had refused to work on non-union-made millwork produced in Wisconsin. The lower courts ruled against them, the Appellate Court reversed this decision, and the Supreme Court affirmed the decision of the lower court. "The crime of restraining interstate commerce through combination is not condoned by inclusion of intra-state commerce as well," reads the decision.

In the second decision, the Court for the first time abridges the right of labor to strike. This case reached the highest court from lower courts in Kansas, where the scope of the Kansas Court of Industrial Relations act was called into question. The decision of the U. S. Supreme Court pivots upon this clause: "The right to carry on business—be it called liberty or property—has value. To interfere with this right *without just cause* (italics ours) is unlawful." The court adjudged a strike to collect back pay of a Kansas worker unjust. "Neither the common law, nor the Fourteenth Amendment confers the absolute right to strike," it continues.

What is in the mind of labor as to these two decisions?

The first case suggests this question: "Are the anti-trust laws going to be used to apply to labor unions, and not to business corporations?" Shortly before the Supreme Court handed down its decision in the Brims case, a decision affecting the General Electric Company was announced. This case also arrived from a lower court, where these charges were preferred: that the "General Electric Company in its business of making and selling incandescent electric lights had devised and was carrying out a plan for their distribution throughout the United States by a number of so-called agents, exceeding 21,000, to restrain interstate commerce," and second that "it was achieving the same illegal purpose through a contract of license" with the Westinghouse group. The U. S. Supreme Court ruled "that there is nothing as a matter of principle or in the authorities which requires us to hold that genuine contracts of agency are violations of the anti-

trust act." The open door to immunity for the General Electric was patent laws protecting these conditions. It would seem that when patent law conflicts with anti-trust law, patent law has the right of way. Unfortunately patent laws don't apply to human beings or workers.

Indeed, if our memory does not fail us, we have yet to see a case where the anti-trust laws have been invoked against corporations.

In regard to the second decision, labor asks: "Is this but the opening wedge to a complete annulment of labor's right to strike?" Whereas the specific case under adjudication has been settled equitably, in accordance with state law, is there not danger—yes, likelihood—that the large and somewhat vague principle upon which this specific decision rests, will be used in inferior courts, to abridge labor's important right to strike, still further? This use of *obiter dicta* of the court has been an all too-frequent occurrence.

Just now the United States is enjoying universal healthy industrial relations, but these two decisions lay the basis for future evil contingencies. An abridgment of the strike will inevitably bring in the strike's place a less orderly and less wholesome form of industrial protest. Anti-trust laws that cut but one way will bring the nation's courts into disrepute. In a recent national campaign the Court was an issue, much to the chagrin of all the friends of our form of government. It may be that it will be inevitable that the Court again become a political issue.

**Dilemmas of State** At bottom the American people are a pacific people. They don't like wars. They are a commercial people, and now fast becoming a financial people. Even the tireless professional soldiers of the War Department are having a difficult time to put over their war propaganda. Americans resent it. But America's very commercialism entangles it in wars. It is estimated that American bankers and the American government have approximately 25 billions of dollars invested abroad in corporations and loans. This is a vast sum. It rapidly rolls up colossal profits, and it accumulates great responsibilities. It spreads pitfalls before diplomats, and offers temptations to every political charlatan.

These then are the ingredients of the present foreign situation, a situation that stews up problems for all sections of the population. The U. S. Department of State asks, "How can we protect American investments abroad, when we have an unwarlike people at home?" Hence the state department's policy toward Mexico and South America a combination of deceit, bluff and bullying.

The U. S. Department of War asks, "How can we change a pacific people into a sword-waving, gun-flourishing nation?" Hence an attempt to militarize the public schools.

The American bankers with investments abroad ask, "How can we gobble up more and more foreign concessions without letting the folks back home, and the folks abroad know who owns them?" Hence American capital disguised under foreign names.

And labor asks, "Who does the fighting—always? Who does the paying—always?" And answers, "The underlying population. We do. We bleed; we are crippled; we go hungry; we pay the bills."

The foreign situation is fraught with danger. The absorption of Panama, the nagging of Nicaragua, the defiance of Mexico are but symptoms of the insidious disease of imperialism which infects us.

**Union Movies** With Frank Gillmore's permission we are going to put a second happy ending to his interesting story of union success in the theatre field, carried in this issue. Mr. Gillmore closes his article with the assertion that the movies must be organized. Since his article was written that achievement has been almost consummated. Studio mechanics at Hollywood are practically 100 per cent organized. That means that union movies will virtually be a fact. Leading film stars are union; musicians are union; stage employees are union; and now studio mechanics, including carpenters, electricians and scenic artists, are union. Only camera and laboratory men lie outside the charmed circle. By terms of the understanding organized crafts are to be hired through the office of the Studio Mechanics' Alliance, which insures none but men with union cards serving the industry. A joint committee of union and producers' representatives is provided for. President Noonan is a member of this committee. Once again it is demonstrated that where intelligence, skill, courage and social consciousness prevail, there union organization predominates.

**Give America a New Year's Gift**

Renewed consecration to the movement to abolish child labor in America is the finest New Year's gift an American can give his country. This is made more apparent by the announcement of the U. S. Children's Bureau that child labor in industry is on the increase throughout the country. The score is as follows:

The 24 cities, with the percentages of increased child workers in each are: Birmingham (20.1), San Francisco (9.9), Bridgeport (29.8), Hartford (18.2), New Britain (37.4), New Haven (14.4), Waterbury (17.4), New Orleans (.5), Baltimore (12.0), St. Louis (4.8), Jersey City (1.2), Newark (2.0), Trenton (17.3), New York City (2.0), Rochester (16.0), Yonkers, (35.2), Philadelphia (24.9), Pittsburgh (8.8), Reading (27.9), Milwaukee (28.8), Fall River (43.7), New Bedford (33.8), Detroit (13.6), Minneapolis (18.8).

The test of a civilization is not wealth, but what it does for children.

**Let's Not**

**Have Unions?**

A union man went to sleep New Year's Eve—so the story goes—and dreamed a dream. He saw the hands of Time's clock turned back 50 years, and he saw a unionless world, and with the strange twisted logic of the dream, he saw industry in this new year of 1927 as it would have been if unions had not been formed a half century ago. And in this dream of a unionless world, here are some of the things he discovered:

No eight-hour day. No five-day week. No living wage. No freedom of speech. No public schools. No workers' education. No democracy. Sweat shops. Child labor everywhere. Greed and wealth triumphant.

And the dreamer awoke—went down at once to the union hall and paid his dues three months in advance—so the story goes.

## THE FOREMAN

By STACEY W. HYDE

## I

A MASS of cloud swirled across the moon and let fall a few heavy drops of rain as a man stepped out of the doorway of the Labor Institute. He turned up his coat collar, plunged his hands into his pockets and strode rapidly down the road toward the railway. The door, as it closed behind him, seemed to touch a secret spring, for immediately the clock in the tower above chimed and eleven sonorous notes followed slowly. As he reached the level crossing the gates clicked together, barring the road, and he could hear the drop of the signal a few yards up the line. As he turned into the dimly lit station to cross over the foot-bridge, he almost cannoned into a woman standing just inside the door.

"Sorry!" he said, and, as he turned, "Why, Lil!"

"Hullo, Jack!" she said. "Just off home?"

"Yes," he replied, "It is getting late. Rotten night, too!"

"Is it?" she said diffidently. "I didn't notice. I—I—" she hesitated, and then, "Jack, old man, are you in a hurry?"

"Well," he said, "I told Daisy not to expect me too early, so she won't be waiting up for me. So say on."

"I'm waiting for Harry," she said. "I don't quite know which train he'll come by, and—and—I'm not quite sure how he'll be when he does come." She raised her face to his and he could see tears in her eyes, ready to fall. It was the face of a woman still young, though there were lines on her forehead and round her eyes; a dimple lingered about her mouth.

"Oo—ah!" he mused. "They've had that do on tonight to say goodbye to Hewlett, haven't they?"

"Yes," she assented. "I thought you'd gone as well, to tell the truth."

"No," he said, "I had a meeting I had to attend. Don't care much for these affairs, anyhow."

"Union meeting?" she asked. He nodded. "You are a busy chap," she went on. "I don't know what they'd do in the branch without you. Not but what I don't think the old union's more bother than it's worth sometimes," she concluded defiantly.

"Why, Lil, it don't bother you and Harry much," he twitted; and then more seriously: "If Harry liked he could make this branch alive—humming with life. His smile's got about a million times as much influence over the chaps as my straight mug."

"That's it!" she caught him up. "It's because you are so straight they listen to you. They may like Harry better, but—but—" she broke off, and looked away.

"Hewlett's leaving the end of next week," he said abruptly. "I've been offered his job."

"Jack!" she exclaimed delightedly, "I'm ever so glad."

"I don't know," he said, "I don't know. It means giving up the union—going back on Harry and all the fellows. But it means a good lot more money—and there's Daisy and the kiddies to think of. I'll be able to send young Harry to a decent school, perhaps. But I don't know—it's like selling my soul to the masters."

"What nonsense!" cried Lil. "Being foreman don't mean that you've got to walk by on the other side of the road with your nose in the air; or that you've got to begin sweating and rowing. My goodness, the ideal!"

There was a rattle as the train ran into the station and came to a standstill. From a compartment near the engine floated the sound of song. No passengers alighted, and the guard was just waving his green light, when the door of the concert booth opened with great suddenness and a man half-stumbled, half-fell on to the platform. From his prone position, as the train gathered speed, he continued to inform it, thickly but heartily, that somebody was a "jol" good fella and sho shew a lous." The solitary porter, also doing duty as ticket collector, called out sharply: "Come along, there! 'Urry up!" and seeing it had no effect, strode down the platform towards him.

"Look here, Lil, you nip off home and get things ready," said Jack Marsh. "I'll bring Harry along."

"Oh, but you'll be so late getting in yourself," she remonstrated.

"Don't you worry about that. Harry'll be

to perform that same service for his friend.

## II

The next day was Sunday. No self-respecting individual ever gets out of bed before 8 o'clock on a Sunday morning. As a matter of fact it was some time after 9 o'clock before Harry Lee awoke. The first thing that penetrated his consciousness was an urgent desire to put his head under the tap and wash away from it some of the fiery mud that seemed to fill it. On the way down he met his wife on the stairs.

"Hullo, old girl, what's the trouble?" he said. "You've been crying!"

"Oh, Harry!" she exclaimed, "you know." "I was a wee bit overburdened last night," he admitted. "Still, it was a special occasion. Nothing to worry about, really, 'cos I'm not likely to get so many free drinks again in a hurry, m'dear. And this morning! Have you ever seen a couple of canoes on a giraffe with a sore throat?"

"No, you old silly," she said, laughing.

"Then behold one now!" he exclaimed. "Come on, give us a kiss and be friends."

He caught her around the waist, carried her down the rest of the flight and sat her down upon a Windsor chair in the kitchen.

"That's it! Now don't you move till I've cooked the breakfast!" he commanded.

"Why, I've had mine, and yours is all ready in the pan."

"This giraffe must have a cold in the nose as well as a sore throat," he remarked. "Oh, well, I sha'n't be a minute having a rinse."

Half an hour later, his breakfast of kippers being disposed of, he was about to take his paper out into the garden, when there was a knock at the front door. His wife answered it and called along the passage: "Here's Jack Marsh to see you, Harry!"

"How's the world, Jack?" he shouted to that individual. "Come along right through to the farm. I'm just going to inspect the crops!"

"Morning, Harry," said Jack. "I half expected not to find you up!"

"Always up by half-past ten, old man," returned Harry. "If you really want to make a special effort to catch me, I'll arrange with the night watchman down at the yard to give you a call as he goes off duty."

They went out into the garden and examined the tiny growths with interest. For a while the respective merits of various manures were discussed and such intensely interesting topics as the best destructor of slugs, wireworms and the like. If a man has never tasted a real thirst for blood, let him attempt to grow vegetables in a plot that was lately grass. Jack suddenly changed the subject.

"Did Lil tell you I'd been offered Hewlett's job?" he asked.

"What you?—Lil?—No! Here, Lil!" shouted Harry through the scullery window. "Why didn't you tell me Jack was going to be foreman?"

"Haven't had a chance yet," she called back. "He only told me last night."

"Not quite so fast," said Jack. "I said

Here is a moving story of the worker's life on the job, the first time published in America. By a British worker-author, it catches the very feel and look of the shop, and the shop's joys and terrors.

To the worker the job is the biggest thing in life. What happens on the job is more vital to him than what happens on the street, at the theatre, and at the club. Yet but few stories of the shop have been written by any writers in any country. Here is a story from a little volume by Hyde called "SHOPMATES." Read it.

much better with me than with you," he assured her.

"All right. It's awfully good of you," she said; and turned and ran quickly down the street, so that he should not see her crying.

The temporary ticket collector had succeeded by this time in getting Harry to his feet, in spite of the endeavors of that worthy to embrace him; and the two came slowly towards the booking office, Harry's wayward feet sometimes endeavoring to trip up the collector, sometimes himself. Jack went forward to meet them.

"You a friend o' this bloke's?" queried the collector.

"Yes," replied Jack. "Hullo, Harry!"

"Zhe a frien-o-my?" said Harry contemptuously. "Corse 'e's a frien-o-my. Ev'ry one knowshe's a frien-o-my. Shole Jack Marsh, ain't it, Jack?"

"Right you are, old man. Come along home. Lil's getting a bit anxious about you."

"A-n-a-xious 'bout me? I'm alrigh'. Shnothin' wrong me," rejoined Harry. "I'm comin', ole fella. E's jolly goo' fella—"

Jack linked his arm in the other's and walked him off, still singing lustily, down the road. It was not the first time he had had

I'd been offered the job, not that I'd taken it!"

"Same thing, ain't it?" queried Harry.

"Not quite. I've not decided. You see, there's one or two things. It'll mean giving up my active work for the union, I'm afraid. It seems damnable like letting the chaps down. The responsibility I'm not afraid of, except for one thing. It means taking on men—and sacking them. It's a rotten job sacking men, Harry—a rotten job. You just imagine—sentencing a man to starvation perhaps, for a thing you've often done yourself, and not been found out. My God, I don't know what I'd do if I had to stand off a man with a wife and kiddies. I don't think I could do it."

He paused. Harry wagged a finger at him.

"There are two things," he said, "that it is possible to talk. Sense and nonsense! You've given forth the nonsense. Now we'll have some sense. Item one: There are plenty more chaps besides you can do the union work, so don't let that upset you, though I'll admit they're not so good, most of them. Item two, which seems to worry you: If a man's got to be sacked it won't be your fault, it'll be his own."

"That's all very well—" began Jack.

"Don't interrupt! Item three: If the firm thinks you're the man for the job, you are the man for the job and you ought to take it, if you don't want to be called a slacker."

"There's something in that," said Jack.

"Item four: It means a damn big rise and I've never heard that you're a blooming millionaire."

"But, Harry, it'll mean we shan't be able to be the friends we have been—in the workshop I mean, of course."

"Cheer up, Jack! We'll put a clause in the treaty like this: 'If the aforesaid Jack Marsh doth wilfully pass by the aforesaid Harry Lee with his nose elevated above the horizontal, he shall immediately be bashed upon the head with a spanner and the carcass burnt."

"You are a fathead sometimes, you know," said Jack seriously.

"The discussion and meeting are declared closed," said Harry. "We will now form into procession, friends, and conduct the 'ero to his 'ome!"

He seized an old tin bath that was hanging from a nail in the wall, caught up a stick and proceeded to march down the garden,

banging away with a will and shouting, "See the conquering hero comes!" at the top of his voice, until Mrs. Lee, running out, declared that he was to leave off at once or they would be having the neighbors in.

"Well, I'm off!" said Jack to her. "Come along to tea this evening, won't you, and bring both the kids."

still on the fields, and the night breeze wearily seeking a resting place, is a beautiful thing. Early morning in a dirty little manufacturing riverside town, where the sun only casts long grey shadows across the narrow streets and where the wind cuts coldly between shabby houses with drawn blinds, is not quite so beautiful. Though, if you get away to the river bank and hear the steamers blaring through the mist and see the great wreaths of smoke from the towering stacks black against the sky, it has a charm and mystery of its own. You are not in a fairy land, as in the country, but in a land of goblins—goblins with hoarse voices and sombre faces, but gigantic; goblins who are cruel and ugly, but the efforts of whose mighty arms are felt to the ends of the earth.

Jack Marsh, walking to work on Monday morning a week later, thought not particularly either of the charm or of the discomfort of the morning. He was wondering just what the forthcoming day would be like. It was well he was so familiar with the road; if his feet had not automatically stepped up and down curbs and avoided protruding cobbles, his mind would not have directed them to do so.

He went back to the interview with the manager, Gracey, on the previous Monday. "I'm very glad you've come to this decision, Marsh, very glad. The chief qualification of a foreman is not so much superior knowledge and workmanship — though that is, of course, very necessary, too—but the ability to handle men. Mr. Hewlett has noticed, and I might say I have also noticed, the authority you already possess over the men in the shop. And I must ask you, as custodian of the firm's interests, to develop and exercise to the full, in these troublous times, that authority."

"Custodian of the firm's interests!" It had jarred, jarred badly. He had almost withdrawn his acceptance of the post there and then.

A great part of the night he had lain awake turning over in his mind what appeared to him to be the great question: Would it be disloyal to the others to accept? He had visualized to the full that it would mean abandoning his work for the union; but against that he placed the good he would be able to do by virtue of his position. Hewlett had been crooked and

(Continued on page 46)



HE PAUSED A MOMENT TO VIEW THE WORLD OF INDUSTRY BENEATH

"Both the kids?" she asked questioningly.

"Yes, Harry and the baby," he replied, and darted away through the garden gate before his friend could avenge the thrust.

### III

Early morning in the country, with the eager sun newly risen, the mist and the dew

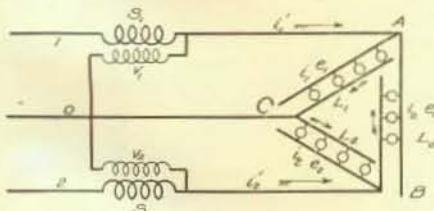
# Power Measurements in Polyphase Circuits

By PROFESSOR C. M. JANSKY

To end the discussion of polyphase circuits with merely the mathematical expression for power seems incomplete, for the basis of all engineering is measurement and not merely mathematical equations. It seems appropriate, therefore, to extend the discussion to methods of measuring power and energy in polyphase circuits.

In the first place, what do we mean by polyphase currents and polyphase circuits? From the preceding article the following definition can be deduced:

A polyphase generator is one whose armature consists of several windings in which are induced electromotive forces having maximum values at different instants of time. The time intervals between the maximum values of these electromotive forces are equal and numerically they are either one-third, one-fourth or one-sixth of a period. Thus in 60 cycle polyphase generators this time interval may be one one-hundred-eightieth, one two-hundred-fortieth, or one three-hundred-sixtieth of a second. Seldom, if ever, are generators built with more than six phases. The three phase generator is the most common in modern central stations. The windings of these generators may be either delta or Y-connected, and they may feed into either three-wire or four-wire circuits. Polyphase



(FIG. 28)

circuits are, therefore, circuits to which energy is supplied by polyphase generators.

The elements of electrical power are electric current, electromotive force, and the time interval between their maximum values. In other words, the elements are amperes, volts and power factor. Any power measuring device must, therefore, contain elements which are actuated by the electrical quantities whose product gives power, and these elements must so react as to give a torque or deflection proportional to this product.

All power measuring instruments have a coil or coils through which flows the load current or a definite fraction thereof, and a coil or coils which carry a current proportional to the voltage impressed on the load or consuming circuit. One of these coils is mounted in such a manner that the slightest force will cause it to move to a new position. The force causing the motion or deflection of the movable element is the reaction between the current in the ammeter and voltmeter coils. It is one of the fundamental laws of nature that when two physical entities under specified conditions exert a mutual force on each other, doubling one of the entities doubles the force, and doubling both entities quadruples the force. To fully realize this law let us consider the common tug of war contest. Assume first that only two individuals are pulling in opposite directions on a

This article ends the first series of Professor Jansky's papers written during 1926 for this Journal. He will begin in February a new series relating to the history of science with special reference to electrical development.

spring balance between them. If one pulls with a force of 100 lbs., the other must also pull 100 lbs. If another person joins the tug of war and also pulls 100 pounds, the balances will show 200 pounds. If two teams of two men each are pulling, and if each man must exert a force equal to that of his opponents the balance will show 400 pounds, if the teams consist of three men each the force will be 900 lbs., etc. In brief, the force is equal to the product of the number of men on one side by the number of men on the other side and the unit pull of the two first men. Another way of acquiring a realizing sense of this fundamental law is to consider a pound mass near the earth. The force of attraction between the earth and the pound mass is one pound. If the mass be doubled the force will be two pounds, but if the mass of the earth be doubled at the same time, the force will be four pounds. Likewise, if both the mass of the earth and that of the body be tripled the body will weigh nine pounds, etc. This shows that when we select the reaction between two units of the physical entity as the unit force, then the force between any multiples of these units is equal to their product times the unit force.

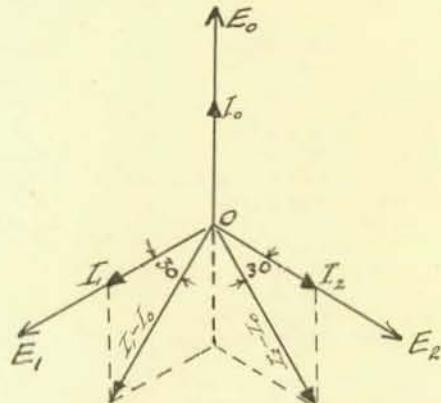
## How Reaction is Measured

When two current carrying wires are near each other, a force of attraction or repulsion exists between the two wires. This is a physical fact and must be accepted as such. This force is produced by the currents in the wires. If we call the force unity when one ampere is flowing in each conductor, then in harmony with the law illustrated by the tug of war experiment, when each conductor carries two amperes the force will be four units. When one conductor carries three amperes and the other one carries two amperes, the force of reaction will be six units. In short the force of reaction is proportional to the product of the currents in the two conductors or coils. But if one of the conductors carries the load current and the other carries a current proportional to the voltage, the product of the two currents will be proportional to power. As the force between the conductors is likewise proportional to the product of the two currents, this force is a measure of the power. This in simple language is the principle of operation of wattmeters of whatever form.

In one type of wattmeter, the induction type, the load and voltage coil currents do not react directly, but by transformer action they produce currents in a disk which is free to rotate, and these secondary currents produce the torque, but the physical principle of operation is the same.

If the movable coil, or disk, of a watt-

meter is permitted to rotate, then the speed is proportional to power, and the number of complete rotations within any period of time is a measure of the energy delivered to the load circuit. Such an instrument is called a watthour meter. The number of rotations of the movable coil, or disk, are registered on a dial by a cycle, or revolution, counter. It is comparatively easy, therefore, to see how an instrument can be devised to measure the product of current by the voltage, but this is power only on direct current circuits. The puzzle is, how does such an instrument measure power on alternating current circuits? In the first place the direction of the force between the movable and fixed coils is determined by the relative direction of the currents in the two coils. If the currents are in the same direction, there is a force of attraction, while if the currents flow in opposite directions, the coils will repel each other. This likewise is an experimental fact which is independent of the color of the experimenter's hair or of his politics. It is a fact which no argument can change.



(FIG. 29)

When two separate alternating currents flow in the two coils, the reaction will be in one direction only so long as the direction of flow of the two currents remains the same. When one reverses its direction of flow, the torque will reverse, and the deflection will also reverse. When the direction reverses in both coils, the deflection will be as before.

It is evident, therefore, that if the two currents in the two coils reverse their directions of flow at the same time, the deflection of the meter will always be in the same direction. Two currents of given intensities will therefore, produce a greater deflection if they are in phase than when one lags or leads the other. This decrease in deflection is proportional to the power factor of the load. A properly designed and constructed wattmeter thus automatically corrects for the power factor, and the deflection of the meter is at each instant proportional to the power.

The measurement of power in a single phase circuit, or any two-wire circuit, is a comparatively simple operation. All that is necessary is to connect the current coil of the wattmeter in series with the load, and the voltage coil across the wires or in parallel with the load, and read the wattmeter. If the load current and the load

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# WOMAN'S WORK

## “Go-cart Chauffeurs and Kitchen Engineers”

### COMMERCIALIZING CHRISTMAS

#### What's in a Name?

You know these fellows who come around collecting lists of names for the city directories? Isn't it irritating for a hard-working wife who spends all her time at the arduous task of maintaining a home and a family, to find herself listed as "occupation—none," or slurred by the rather contemptuous term, "housewife"? A friend of mine was so much incensed that she listed herself as go-cart chauffeur and kitchen engineer."

A great many home duties, some tiresome, some very pleasant, will probably always fall to the lot of the world's wives and mothers, but now, in America especially labor-saving devices are taking care of so much of the grind for us that women have a chance to look out of their kitchens and see what is going on in the rest of the world.

#### MR. KRESGE'S MILLIONS

That a living wage could be paid if women and girls were organized to demand it, is attested by the tremendous profits of the five and ten cent stores. S. S. Kresge Stock worth \$1,000 in 1913 is now worth \$73,260 and Woolworth stock of \$1,000 in 1923 now has a market value of \$18,400. Both corporations are notorious for the pitifully small wages paid their shop girls.

#### INTELLIGENCE TEST FOR WIVES

No wife who has complained of an erring husband in his years as a divorce court judge has been able to pass this examination with better than an 80 per cent mark, says Superior Judge James S. Quinn of Oakland, Calif. What do you think of it?

The test follows:

1. Do you take into regard your husband's income before you spend money?
2. Do you comb your hair and dress neatly for breakfast?
3. Do you put thought into your cooking?
4. Are you willing to stay home at night with your husband when he is tired from a day's work?
5. Do you allow him the comfort of smoking in the house?
6. Do you control your impulse to nag?
7. Do you take an interest in his business?
8. Do you bother him with all your petty household worries, or do you try to make yourself as agreeable a companion as you did before your marriage?
9. Do you make your home pleasant for his friends?
10. Have you gotten over the tendency toward foolish jealousy?

The whole test might be summed up: are you tolerant, resourceful and helpful?

It's all over now, the tide of Christmas giving recedes, leaving its gaudy wreckage of broken toys, wrong-size hosiery and "gift" slippers, and "gift" editions of the works of Dr. Crane and Edgar A. Guest. The greatest Christmas splurge in the history of the United States is over and the flattened consumer may now recover a little strength before the florists' and milliners' annual carnival, Easter.

When we say the greatest Christmas splurge in the history of this country we are relying on the prophetic powers of the eminent Wall St. Journal where the cheerful news was published some days before the culminating 24th—the last shopping day before—

Never have stores put a greater punch into Christmas selling. Brilliant displays, with their dazzling effect on feminine eyes, white-whiskered Santas, live reindeer, to bring "the kiddies" into the toy departments, advertising stressing the high-priced, luxury goods, all these have been a part of the supreme selling event that crowns Mr. Hoover's "peak prosperity of the nation." Buyers of great department stores have combed the markets of the world for a year for the choice, the exotic, the unique—and the expensive. Anyone who watched advertising soon understood that this was not to be a Christmas for useful gifts. "Buy father, mother, sister, brother, Aunt Mildred, your friend, and your friend's ladies' maid, those luxurious trifles you know they wouldn't buy for themselves. \* \* \* a slogan calculated to divert many dollars into merry holiday cash registers. It is the useless goods that bear the high price tags, that supply the big new market. And goodness knows dad would never have bought that brocaded lounging robe for himself!

Fortunes were spent on antiques this year, antique furniture, china, pottery; antique fabrics from France. French bags, of handmade lace or fabrics so fine one entertains grave doubts for the safety of the workers' eyes, Italian leather work, imported dolls whose costumes cost as much as those for the average person, French perfumes at \$50 to \$300 a bottle, and a riot of imported food delicacies, such were the feature displays in New York stores.

Now we weren't buying many gifts like these for our very deserving families, friends and old maid aunts. Were you? We presume you were not. And the poor harassed white collar worker, mortgaged to the neck in installment debts, his "dollar down" is about used up. No, this has been a Christmas revel for rollicking bondholders, for those whose incomes have gone up with the thundering rise of corporation profits. An orgy for managers, vice presidents, directors and others, members or faithful servants of our ruling minority. A holiday that the stores created as a special kindness for those who have so much money they scarcely know what to do with it.

Don't think we are envious. We don't care a lot about \$300 bottles of perfume or antique china. But if electrical workers in a few of our locals should ask for raises this year of 5 or 10 cents an hour, we should hate to have any one say they were greedy.

\* \* \* \* \*

Santa Claus is the patron saint of the retail business, for the greater part of the profits of department stores are taken in during the last three months of the year and a large percentage in the crucial last few shopping days before Christmas. No wonder they urge generosity! Even Christmas cards, once a simple, inexpensive greeting, now are priced in soaring sums, with advertising so worded one could scarcely look the world in the face if one did not send them out in droves. Personally, we slink by in our advertising-induced shame.

And not only the birth of Christ has been capitalized by merchants, but every other possible holiday as well, and some that seem to have been created especially for the purpose, such as Mothers' Day and Fathers' Day, the latter boosted hurriedly into the procession by the men's clothiers.

Easter is now a fashion parade, the day when florists and vendors of millinery, and women's ready-to-wear clothing, cash in heavily. The day that marks the beginning of spring, the day when no woman dares face her friends and enemies on the street without a smart new hat. The zenith in retail sales of coats, suits, dresses, and all feminine accessories for the spring season.

Mothers' Day gives the florists another chance at us, while the trade in fancy boxed confectionery tries to get its share. Fathers' Day has not meant much to the country at large as yet, but men's wear merchants promise to give it their best efforts when the time comes. "Of course you'll want a new dress for Memorial Day—for Fourth of July," the ads tell us. August and September are horribly dull months for retail merchants—there are scarcely any holidays at all! But Thanksgiving is coming, the fete day of grocers and of the housewares and linen departments—and, oh, joy! Christmas!

Now please don't imagine we don't like holidays. To working people especially they offer the most delightful breaks in the daily routine, time for festive dinners with the family, gatherings of friends, little trips.... We honor the spirit of giving, especially among humble folk where giving is sharing. But what we object to is having our spirit of giving induced, made a synthetic instead of a spontaneous emotion through the efforts of inspired copywriters; having the gifts we will give picked out for us, foisted upon us by the merchandising men of department store dukes and merchant princes. America's thought and now even her emotions are being made to order.

# Put the Union Label on Your Man's Clothes

There's a saying that has quite a vogue with department store heads, and it really indicates a widespread attitude:

"The Customer is always right."

What the Customer asks for, he gets, and the more important a Customer he is, the more he can demand in attention, servility, special purchases, and expensive adjustments whenever goods do not suit his slightest whim.

Nine out of ten times, in the stores of this country, if a woman doesn't actually make the purchase, she directs it. Women are the buyers for America's families.

All of which leads us to the fact that wives of union men, if they will only work together, will become one of the big Customers whose will the stores never question.

Union wives, downtown shopping for ties, sox, shirts, underwear and the many other articles of clothing most women buy for their husbands, sometimes are timid about asking for the union label. There are no big placards in the stores to guide them to union label merchandise. Perhaps they do ask, and the clerk either "doesn't know" or thinks "we haven't any."

Perhaps you have been in a similar situation. What can you do about it, you ask.

Well, you can quit, buy non-union made clothing with your husband's good union wages and go home with a stain on your conscience.

You can search and find the store where union-label goods are handled, even if it is a bit out of your way, and give it your patronage.

Or—you can make the merchant come through on his motto, "The Customer is always right." You can keep on asking until your very insistence drives him to put union-made goods on his shelves. And other union wives will help you.

There are so many good union made brands of work clothes, and they are so well advertised and widely known that you can't help finding them if you try. Most union men know these brands by long usage and wouldn't wear any others. Headlight, Lee, Sweet-Orr, Signal, and many other excellent brands, lead the field in work clothing.

On the opposite page we are showing some of the clothes a good union man likes to wear when his work for the day is through, his "best" clothes. The brands we have featured are only a few, representing a great field of men's fine clothes, made by union workers, carrying an assurance of sanitation, fine quality materials, and careful workmanship along with the union label. Michaels-Stern and Company, a nationally advertised make of men's suits and overcoats, is worth remembering next time your husband needs new clothes; and there are 40 other makers of men's ready-to-wear clothing that use the label of the United Garment Workers. And scores of the best shops, all over the United States, where made-to-measure men's clothing is tailored, are on a strictly union basis.

Probably no make of men's shoes is better known than Florsheim, and this shoe is representative of the sturdy quality and handsome appearance that goes into shoes that carry the union label. You can buy shoes that cost less, but Florsheims are worth the extra cost on a mileage basis alone. Most men buy their own shoes, of course, but the wifely influence is usually felt.

And there's no excuse for him if the hat he wears lacks the label. There are more than a hundred manufacturers of men's hats who use the label of the United Hatters. We've chosen the Mallory hat, illustrated

on the opposite page, to represent them, because it is so widely advertised and carried in so many shops. Felt, straw, or panama, Mallory makes them all, and in mighty good-looking styles, like those pictured here.

More than a hundred other manufacturers put the union label in cloth hats and caps. Look for it!

Almost all of the big, nationally advertised brands of full-fashioned hosiery, not only your husband's, but your own silk hose, are made in organized shops, but many of these manufacturers do not care to play up the union label. That is why, in choosing for this display, we picked men's hose from the Webb-Smiley Company of St. Louis. This is advertised as union-label hosiery, and its quality certainly will not disappoint you. The words, "Union Made" are an integral part of the Webb-Smiley trade mark—*Quality W-S Brand, Union Made*. This company offers not only men's hosiery but an excellent line of silk neckwear, like that shown, and many other styles, leather belts, men's garters, suspenders, armbands, handkerchiefs—remember this when you are buying gifts, and ask your dealer to stock them, or one of several other reliable union-made brands.

There is just one manufacturer of athletic underwear who uses the union label, the S. and S. Textile Co. of Troy, N. Y.

And there is just one Union Label Collar Company, Albany, N. Y., makers of Bell Brand collars and cuffs. A few of the many styles of collars they make are illustrated on the opposite page. There is a great variety, both in the stiff and semi-soft collars. Be sure to ask for them.

And by the way, when you are in the store look for the union store card of the Retail Clerks' Union, which should be prominently displayed.

If you don't see what you want, ask for it. Remember, the Customer is always right! And you're a Customer.

## UNION-LABEL SHOP FOR WOMEN!

We've got a warm spot in our heart for this town of St. Louis. The International Brotherhood of Electrical Workers got its start there, you might say—our first national convention was held there and for many years St. Louis Local No. 1 and its members were the mainstay of the Brotherhood, from organizing right down to some very necessary financial backing.

Now here's something new from St. Louis that ought to make a hit with every electrical worker's wife. The town has certainly been progressing—it's a few jumps ahead of the rest of us in some respects.

For instance, during the last year the Joint Council of Women's Auxiliaries has come into being. Mrs. Mary E. Ryder, of Typographical Union No 8, is president, and auxiliaries of many other trades are represented in the council. Now, we really hate to admit this, but we couldn't find any mention of the electrical workers.

Some more good news from St. Louis is that this town now has a union label shop for women—the first of its kind so far as we know. Women of the labor movement set out to create a shop where they would always be able to find union-made goods for themselves and their men-folks. The difficulty of obtaining these goods at department stores, indifference of manufacturers, made them feel that a shop of this

sort would fill a real need. They established the UNION LABEL SHOPPE at 407 North Eighth Street, right opposite the postoffice and in the heart of the shopping district.

We certainly wish St. Louis was not so far away. How wonderful it would be to go into a shop where we could know without even asking that every article displayed carried the union label stamp of approval that means clean, fine, honorable merchandise! The wives of St. Louis union men should be proud and grateful indeed to the women who have had the courage to undertake this enterprise, and give it every bit of their interest and patronage.

At present, due to limited capital, hosiery, handkerchiefs, leather novelties, umbrellas, raincoats, dresses and towels are all that is offered for women. If the shop prospers, as it certainly deserves to, lines of coats and suits and other merchandise will be added. And right now they have a fine assortment of hosiery, ties, handkerchiefs, belts and other accessories for men and boys—the Webb-Smiley line, that you'll find mentioned elsewhere on this page and the opposite one.

We are—and we're pretty sure you are—wishing this shop all kinds of success and if you live in St. Louis you can help to carry out our good wishes. St. Louis' Union Label Shoppe points the way for labor women of other cities.

## SILK HOSE AND SLIM SILHOUETTES

Youthful experts in economics who make \$15 a week cover board, lodging, clothing—including the very necessary silk hose—amusement and other expenses, in other words, working girls, met the experts in economics, nutrition and menu planning of the Association to Promote Proper Housing for Girls in New York recently, just to talk things over.

"No wonder working girls are fashionably slim," the nutrition experts exclaimed. "They are denying themselves necessary food in order to buy silk hosiery."

Well, \$15 a week will only go just so far. Silk hosiery is no longer the shameful luxury it was considered in the days when \$15 a week was an adequate living wage.

Incidentally, physicians believe the extreme boyish figure is often a sign of dangerous malnutrition. We hope the Association to Promote Proper Housing is going to make an effort to promote a proper living wage.

## Cookery Discoveries

### Spinach Supreme

Here's a way to make your family like spinach, which is such an important factor in the diet of young children:

Wash spinach carefully in several waters to remove all grit, cut away roots and discard all withered leaves. Cook in salted water, bringing slowly to boil, until tender (about 20 minutes). Drain and chop well, then mix with enough chicken gravy (cupful or less) to give flavor and creaminess. This makes spinach taste delicious and is a very pleasant use for a small quantity of left-over chicken gravy.

### Tasty Cheese Sandwiches

Finely chop one small onion, add one chopped hard boiled egg, a dash of cayenne pepper, salt, a tablespoon of melted or creamed butter, and mix with one-half cup of tasty cheese. Spread on rye or graham bread.

# Fashions for Men



The best foundation, Brother—union made shoes. These are the famous Florsheim make.

Some  
Union-Made  
Headliners  
for

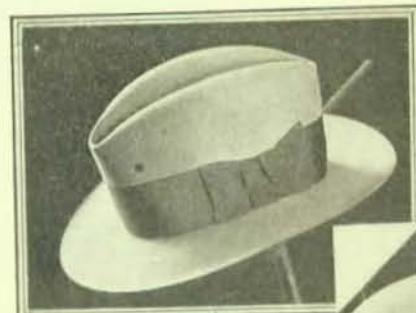


One of the ties of  
Brotherhood—this attrac-  
tive silk cravat,  
made by Webb-Smiley.

1927



Michaels-Stern Clothes



Top it off with a Mallory—there's a union label inside the band. Just two of many handsome styles shown here—aren't they great?

414 E. P. C.

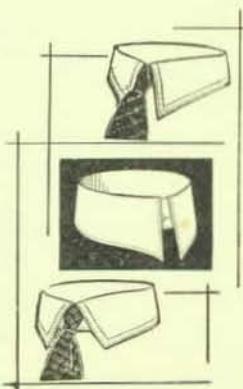


Suits to suit a union man, and overcoats, too, with the excellent work-  
manship of union tailors — Michaels-Stern  
Clothes.

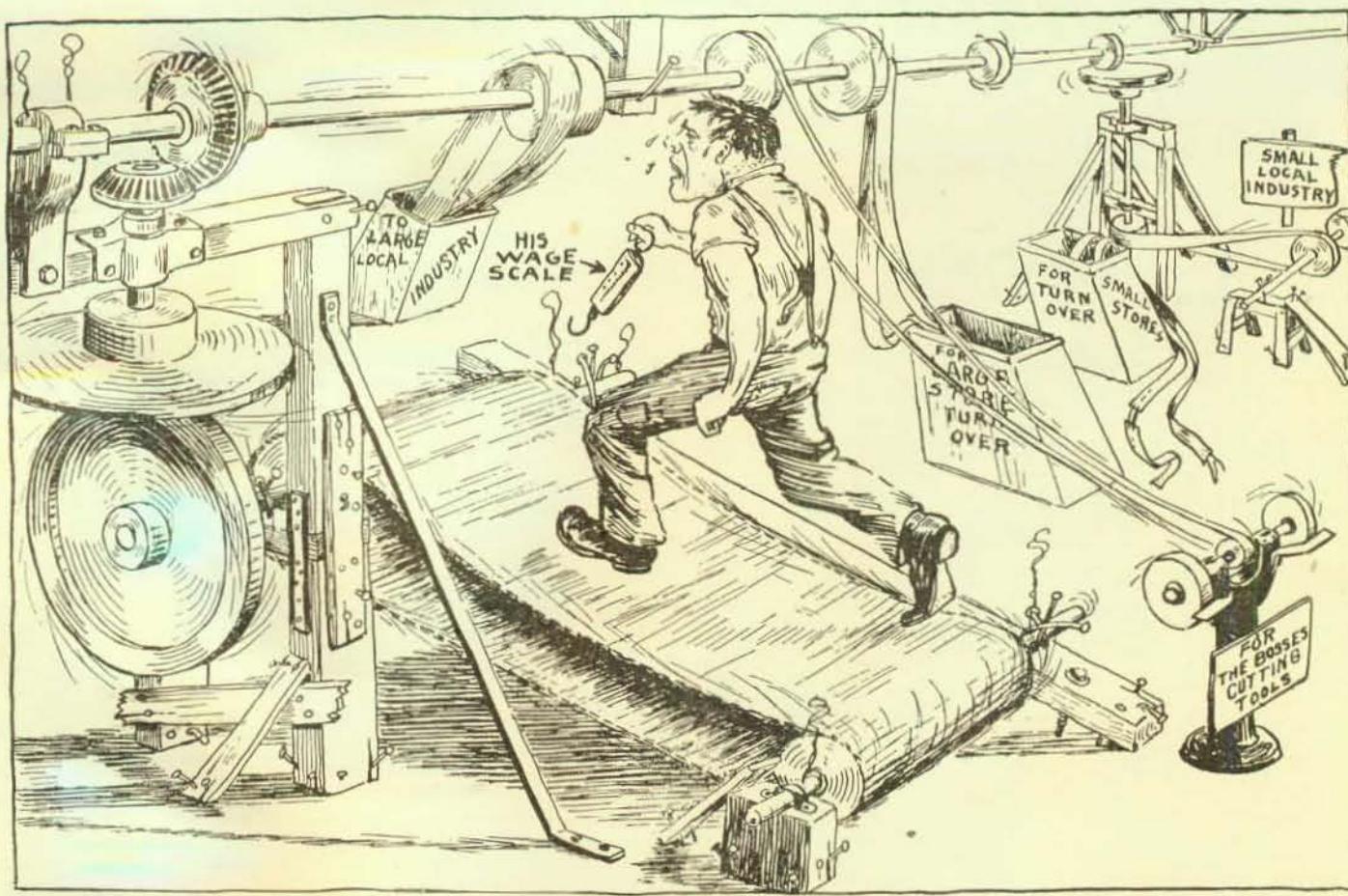


Good looking silk  
hose, and every pair  
with the union label!  
Ask your dealer for  
Unity brand, from  
Webb-Smiley.

Around his neck  
he wears no man's  
collar—unless it's  
union made. You'll  
find good collars,  
plenty of good  
styles, too, in Bell  
Brand.



## WHERE UNIONS DON'T ENTER



Cartoon by Goody.

See the man. The man is running frantically. Where is he moving? To a fire? No. But he wishes he was running to a fire. For he is running to the land of nowhere. He is running to meet old age, poverty, despair. What does the man carry in his hand? A scale. But what a little scale! Yes, it is a little scale, but it is big enough to weigh all he earns. It's a wage scale. It weighs his wage in a non-union shop. And where does the man live? He thinks he lives in a house with four walls. But he really lives in the machine-age. The machine age? Seemingly machines were built to aid man, but in some industries man is built for the machines. These industries are where unions don't enter.

### ON EVERY JOB

There's a Laugh or Two!

#### Digging Deep

A patient was undergoing all the tortures conceivable in a dentist's chair. "I thought you said this tooth had never been filled before," the dentist asked.

"No, it has not," came the feeble answer.

"But there are traces of gold on my instrument," the doctor persisted.

Still more feeble came the patient's reply, "Perhaps you have struck my back collar button."—Railroad Worker.

"We were slowly starving to death," said the famous explorer at the boarding-house table, "but we cut up our boots and made soup of them, and thus sustained life."

"Hush! hush! Not so loud," whispered the boarders on each side. "The landlady might hear you."—Alnwick County Gazette and Guardian.

#### And Now He's Fired

"What do you mean by whistling like that in this office?" demanded the merchant.

"Well, sir, I thought I'd like you to know that I'm bearing up cheerfully in spite of my miserable salary," answered the clerk.—Railroad Telegrapher.

Am—That girl is a live wire, isn't she?  
Meter—No wonder, she's an electrician's daughter.

#### These College Towns

"Ever been in Podunk?"

"Have I? Spent three weeks there last Sunday."—Oklahoma Whirlwind.

Iowa Democrats can't see why it costs more to ship a bushel of corn than it does a carload of European royalty.—Washington Post.

#### A Free Press

A Scotchman with a pair of trousers hanging over his arm was found wandering through the streets of Detroit the other day. He was looking for The Detroit Free Press.—Painter and Decorator.

#### A COUPLE FROM BACHIE

When a certain party came rolling home about 3 a. m. the other morning his friendly enemy looked him over and remarked, "Why in-su-late?"

The following is not a cross-word puzzle but a conversation that took place in a kosher restaurant. Two patrons walked in and said to the waiter, also a good christian:

Patrons—F U N E X?

Waiter—S V F X.

Patrons—F U N E M?

Waiter—S V F M.

Patrons—V E L V L F M N X.

Thanks for the wise-cracks, Bachie, ol' kid—may 1927 bring many more like 'em, is the fervent plea of this little column.

The doing of things from duty is but a stage on the road to the kingdom of truth and love.—George McDonald.

# EVERYDAY SCIENCE

## Salt

The liquid part of the blood contains an ounce or so of salt. So all the secretions from the body, like tears and perspiration. Salt is being continually lost from the body in these secretions and enough salt must be supplied regularly from the food.

## Color Blindness

Out of the millions of nerve ends in the retina some are able to see different colors. Sometimes these color nerves, or a part of them, are missing, or sick or damaged. Then the eye is unable to see certain colors.

## Woman vs. Man

Man is stronger than a woman because he has larger muscles with more muscle fibres in them. They can exert stronger pulls than the smaller muscles of a woman can. This difference in the size of muscles is part of the general difference in the size of the body, women being, on the average, a little smaller than men.

## Human Body

About two-thirds of the human body is water. The average 150 pound body contains 10 gallons of water, about 24 pounds of carbon, about 7 pounds of lime, about 2 pounds of phosphorus, a little less than 2 ounces of salt, about one-fourth of an ounce of iron, one-fifth of an ounce of sugar, small amount of potassium, sulphur, magnesium, fluorine and iodine. There are nearly five pounds of nitrogen and some thirteen pounds of nitrogen and oxygen in addition to what is contained in the water. The market value of all of these constituents of the human body is 98 cents.

## A Prohibition Stimulant

When a person is tired two or three lumps of sugar dissolved in a glass of water and drank on an empty stomach makes an excellent stimulant. It is harmless except to those rare people who cannot eat sugar at all.

## Human Hair

Men of the white race have from 40,000 to 60,000 hairs in a full head of hair. Women may have as many as 70,000. Other races have fewer hairs than the white race.

## Human Bones

In the human body there are 206 bones including the three little bones in each ear and counting the breast bone which is three parts of one bone.

## Blood

The average body contains about two gallons of blood.

## Air Capacity

The lungs of the average man will hold about ten pints but they are seldom as full as this unless you take a very deep breath. Usually they hold about six pints and only about 1 pint is breathed in and out at each breath. Ordinary people breathe about twenty times a minute, so you use about twenty pints of air in a minute or 150 gallons per hour.

## Body Temperature

If the temperature of the body itself gets above 107 degrees, even for a short time, death is nearly certain. Even 105 degrees is dangerous. The brain stops working at this point. A person can withstand an outside temperature much higher than this because the body itself does not get hot. In Death Valley, men can work in a temperature of 125 degrees. Even 145 degrees has been observed, but the copious perspiration and its quick evaporation, due to the dryness of the air, keep the body much cooler than this.

## Standard Yard

There is preserved in Paris a certain metal bar made of platinum-iridium. This is the official standard of length for all civilized countries. All other official and correct yardsticks or foot rules or meter rules have been compared with this bar or with verified copies of it. There is no natural or absolute standard of length. It is all perfectly arbitrary.

## Thermometer Action

When things are hot, they swell a little, they expand. The quick silver in the thermometer does this and the glass tube and scale are merely evidences which show us just how much the quicksilver has expanded.

## Electric Engraving

Is a method of etching metal plates by the action of electrolysis. It consists of covering a metallic plate with wax and tracing thereon the design, so as to expose the metal. The positive terminal of a battery or dynamo is then connected to the metal which is then placed in a bath opposite another plate of metal connected with the other terminal of the battery. The action of the electrolysis dissolves the metal on the exposed portions of the waxed plate and deposits it on the other plate.

## Light

Light is waves in the ether. If you drop a stone into a pond of still water, you will see a ripple or small wave spread outward over the pond surface. All space is supposed to be filled with this ether, a very different kind of ether, of course, from that used in surgical operations. This ether that fills space carries waves, just as the water waves are carried on the surface of the pond. One kind of these ether waves is light.

## Color

Color is caused by the difference in length of waves of light. Our eyes see the longer waves as red, those that are a little shorter as orange, etc. The shortest waves of visible light are those which we see as violet. White light consists of light of all the colors, that is the waves of all have lengths mixed together.

## X Rays

X-rays are a kind of light waves, the wave length of which is very short. Some of the waves of X-rays are so short that there are over two trillion of them to the inch. Others are longer, the longest being about fifteen million to the inch.

## Vacuum Bottles

The principle of a vacuum bottle is simple. The poorest conductor of heat is a vacuum. The only heat that will pass through it at all is the kind of heat called radiant heat, such as that received from the sun. Vacuum bottles are double, one inside the other. The space between them is the vacuum. Since heat will not pass through this space, cold things in the inside bottle do not get warmed up by outside heat, nor do hot things inside lose what heat they have.

## Metal Testing

The X-ray is being used more and more for metal testing. All sorts of bars, rods and metal beams are tested with the X-ray to discover defects.

## Electroplating

Electroplating is the process of depositing a layer or coating of a rarer metal upon the surface of a base, or of a metal upon any other conducting surface, by electrolysis. The full details of many processes for electroplating cannot be given on account of their length; the general principle includes a battery or other source of current. The battery has its positive connected to a rod extending across a trough or tank containing the plating bath. Suspended from the rod are anodes of gold, silver or copper, or whatever metal from which a deposit is desired. The other plates of the battery, or the negative elements, are connected with another rod across the trough, to which are suspended the articles to be plated.

## Manganese Copper

Manganese copper is an alloy of 30 parts by weight, of manganese and 70 parts copper. This copper alloy is used for electrical conductors.

## Mineral Oil

Oil of mineral origin is either petroleum, or some of its distillates. It comes from oil wells, or oil bearing shale. Its widest use is for automobile lubrication and general machinery lubrication.

## Nitrogen Gas

Nitrogen is a gas possessing mainly negative properties, being odorless, tasteless, colorless, non-combustible in the air. Nitrogen is four-fifths of the air's volume. Nitrogen gas electric lamps have developed the field of incandescent lamp lighting.

## Coal Mine Accidents

Coal mine accidents in the United States during the first half of 1925 resulted in a loss of 1,089 lives or 234 less than the first half of 1924 and the number of deaths per million tons of coal was 3.89 as compared with 4.73 last year, a reduction of about 18 per cent.

## Musical Stenography

A Swiss inventor has devised a system of musical stenography. Anyone operating this system would be able to take notes of the full score of an opera similar to the way in which an operator takes the speech of an orator.

# CONSTRUCTIVE HINTS

## ARITHMETIC OF ELECTRICITY

### Supervisory Control

The first supervisory control system for sub-stations was put into operation by the Cleveland Railway Company in 1921. This system has been extended until eleven railway sub-stations are completely under control and supervision of the dispatcher who is located in a downtown office building.

From this beginning, three distinct types of supervisory control equipment have been developed. These are the Synchronous visual, Code visual, and Audible types. The first two types give the dispatcher a continuous visual indication of the position of the apparatus controlled, while the third type gives an audible signal such as a bell tap or buzzer tone, informing the dispatcher of the conditions existing in the sub-stations.

### Instrument Errors

Great difficulty has been experienced by manufacturers of direct current instruments in making accurate combinations of shunt and ammeters. The generation of thermo-electric currents within large instruments shunts may cause destructive errors amounting to several per cent at the higher loads. To prevent this error of measurement, the ammeter shunts are made of manganin resistance metal. This material has a very low thermel e. m. f. with copper and, therefore, the errors arising from thermo-electric currents are negligible.

### Foot-Candle Meter

To determine the intensity and distribution of illumination, there has been developed a single, inexpensive light measuring instrument called the foot-candle meter. This instrument is small, compact and of low cost. By means of this instrument, it is possible to get a range of intensities from 0.012 to 100 foot-candles. By its use, the observer can readily determine the illumination of any point at any time.

### Quartz Lamps

A lamp has been perfected which uses a fused Brazil rock crystal, which is the best quality of crystalline quartz, and is especially prepared for high transmission of the ultra-violet rays. The operation of this lamp is simple—an arc forms between the mercury cathode and the tungsten anode. At a mercury vapor pressure of one atmosphere, this arc is concentrated into a narrow cord in the center of the arc tube and becomes the most efficient source of high frequency ultra-violet radiation available. These lamps are valuable for phototherapy, sterilization and photochemistry.

### Standards of Foot-Candles of Illumination For Industrial Interiors

| Location                                    | Foot-Candles |
|---|--------------|
| Aisles, Stairway, Passageways and Corridors | 1 to 2       |
| Assembling rooms:                           |              |
| Rough assembly                              | 3 " 6        |
| Medium assembly                             | 5 " 10       |
| Fine assembly                               | 8 " 16       |

| Boilers, Engine Rooms and Power Houses                                 |      |    |
|--|------|----|
| Forge Shops & Welding, Rough Forging                                   | 4 "  | 8  |
| Fine forging and welding   | 6 "  | 12 |
| Foundries: Charging floor, tumbling, cleaning, pouring and shaking out | 3 "  | 6  |
| Rough molding and core making  | 4 "  | 8  |
| Fine molding and core making   | 6 "  | 12 |
| General Inspecting:  |      |    |
| Rough Inspecting   | 4 "  | 8  |
| Medium Inspecting  | 6 "  | 12 |
| Fine Inspecting  | 10 " | 20 |
| Machine Shops:   |      |    |
| Rough bench and machine work   | 4 "  | 8  |
| Medium bench and machine work and rough grinding                       | 6 "  | 12 |
| Fine bench and machine work fine automatic machines                    | 8 "  | 16 |
| Receiving and Shipping rooms   | 3 "  | 6  |
| Sheet metal works and odd machines                                     | 5 "  | 10 |
| Fine bench and machine work  | 8 "  | 16 |
| Tin Plate inspection   | 10 " | 20 |
| Store and stock rooms, rough   | 2 "  | 4  |
| Store and stock rooms, medium  | 4 "  | 8  |
| Textile Mills Cotton:  |      |    |
| Opening, carding   | 3 "  | 6  |
| Spooling, spinning, warping, weaving, inspecting                       | 5 "  | 10 |
| Silk Mills:  |      |    |
| Warping, weaving, finishing, winding, dyeing                           | 8 "  | 16 |
| Woolen Mills:  |      |    |
| Carding, picking, washing, dyeing                                      | 3 "  | 8  |
| Drawing in, warping and weaving  | 6 "  | 16 |
| Ware house   | 1 "  | 2  |
| Woodworking:   |      |    |
| Rough, sawing and bench work   | 3 "  | 6  |
| Medium machines and bench work   | 5 "  | 10 |
| Bench work (Fine) & machine work                                       | 6 "  | 12 |

### Bulb Battery Chargers

The principle of operation consists essentially of a transformer for converting the voltage to the proper value, and a bulb for rectifying. The bulb is a glass envelope, containing an anode and a cathode in the shape of a filament surrounded by an atmosphere of pure Argon. Leads to the anode and cathode are sealed through the glass walls of the bulbs. For convenience of installation, the filament terminals are connected to the screw base. When alternating-current voltage is applied to the transformer, the filament of the bulb is heated to incandescence by current from a special winding on the transformer. At incandescent temperature, the filament emits electrons, which by collision with the molecules of the gas, ionize the gas and provide means of current flow from anode to cathode. Since the anode remains at a comparatively low temperature, current cannot flow in the reverse direction.

The voltage of the secondary of the transformer is applied to the lead through the bulb and due to the wavelike action of the bulb, current is permitted to flow only in one direction. Most of the bulb chargers will not shut off automatically when the batteries are fully charged.

The small portable bulb chargers are de-

signed to charge single batteries in the homes and private garages, are made as simple as possible, and at the same time as rugged and good looking as possible. In these outfits, the transformer, secondary voltage and internal reactance are so chosen to give a charging current not far from the rated values under any conditions of line or battery within reasonable limits, without any change in connections or any adjustment for different conditions. The application is limited to lines of voltage variation from 100 to 130 volts and to batteries of between 1 and 48 cells. Within these limits the charging current varies from 20 per cent above the rated value to about 50 per cent below, thus, with a line voltage of 10 per cent above normal and charging 3 cells the current will be approximately 20 per cent above the rated value. At 10 cents per kilowatt hour, the two ampere outfit costs approximately 1½ cents per hour. Including the cost of bulbs, the small charger costs 1 cent an hour to run and the large 2½ cents an hour.

### Choke Coils

Wherever a surge of high frequency or steep wave front due to lightning, or any other cause, travels along a line and strikes an inductive winding, it builds up a high voltage between the end turns of that winding, a high voltage to the ground, and reflects the surge back onto the line. Surges due to atmospheric lightning are usually of very high frequency whether or not of high voltage to the ground. It is necessary to guard against this trouble by strongly insulating each turn of the choke coil and the lead to the ground.

### Methods of Making A Plate Ground

**Buried Plates:** A good ground connection for a bank of station arresters may be made in the following manner:

**First**, dig a hole four feet square as near the arrester as possible until permanently damp earth is reached; **Second**, cover the bottom of this hole to the depth of two feet with crushed coke or charcoal (about pea size); **Third**, over this lay ten square feet of tinned copper plate; **Fourth**, solder or rivet the ground wire, preferably copper strip, securely across the whole length of the ground plate; **Fifth**, cover the ground plate with two feet of crushed coke or charcoal; **Sixth**, fill the hole with earth, with plenty of common salt sprinkled in it, using running water to settle it.

### Field Discharge Switches

Field discharge switches are used as a means of opening and closing field circuits and are so designed that when the switch is open the field winding is connected to a resistor, so that the energy induced in the winding is dissipated in a resistor instead of causing undue strain upon the apparatus.

A new automobile attachment enables an instructor to throw out the clutch and apply the brake if a novice driver loses control of the car.

# Pasadena, Flower City, Owns Power Plant

*Data Submitted by W. R. LENNOX, L. U. 418*

THE 19th annual report of the Pasadena Municipal Light and Power Plant has been issued. It shows increases in the volume of business all along the line. There are 7 per cent more customers than the previous year; 18 per cent greater receipts from street lighting; 11 per cent greater receipts from commercial lighting; net earnings are more than 12 per cent; a surplus of \$382,000 is on hand.

Pasadena—like Seattle, Tacoma, Los Angeles, and other western cities—is proud of its municipal light and power plant and electrical workers—members of Local Union 418—are proud of their part in winning, operating and maintaining this monument to civic pride and cooperation.

When the plant started 20 years ago there were four employees; today there are 167. Benjamin F. DeLaney, present general manager, was one of the original four. He has had the full confidence of L. U. 418, and has worked in full sympathy with the union.

So well do the citizens of Pasadena think of their plant that a birthday party was given at the station this year. Employees were on hand to conduct the visitors through the plant, signs were placed about the property to inform the citizen guests about the uses of the equipment. The new 10,000 kilowatt turbine was on display.

The main plant besides the 10,000 kilowatt turbine, consists of condensers, water coolers, switching equipment and four boilers, two of 1,000 horsepower each and two having a capacity of 850 horsepower. The inspection will include the municipal oil storage

tanks, having a capacity of 40,000 barrels, a reserve supply of fuel sufficient to operate the plant for ninety days.

In the old power plant the progress of twenty years will be shown, starting with the original 250 kilowatt equipment and continuing up to the 3,200 kilowatt unit which was in use preceding installation of the new 10,000 kilowatt turbine.

The plant represents a cost of \$2,320,233.46 and its present bonded indebtedness is \$942,628.95. The Pasadena plant is self-sustaining and each year retires bonds and pays the interest on its bonded indebtedness.

"The value of the city's light and power system must not be judged by the amount of its book value," Benjamin F. DeLaney, general manager, told guests. "Its real value is that of its earning power. The physical property has been heavily depreciated, intentionally. However, the earning power of this utility is tremendous and is worth millions of dollars to the people because of the difference in rates charged elsewhere in neighboring cities, and the surplus earned. The saving and surplus last year were equal to 5 per cent on \$13,578,000."

The present time, states Mr. DeLaney, the plant has a peak load of 11,700 kilowatts. Looking to the future, he has recommended to the Board of City Directors the construction of a new 15,000 kilowatt unit which at the present growth of the plant will have a full load by the winter of 1927. With funds available from the earnings of the plant, Manager DeLaney hopes that the contract for the new unit can be awarded early

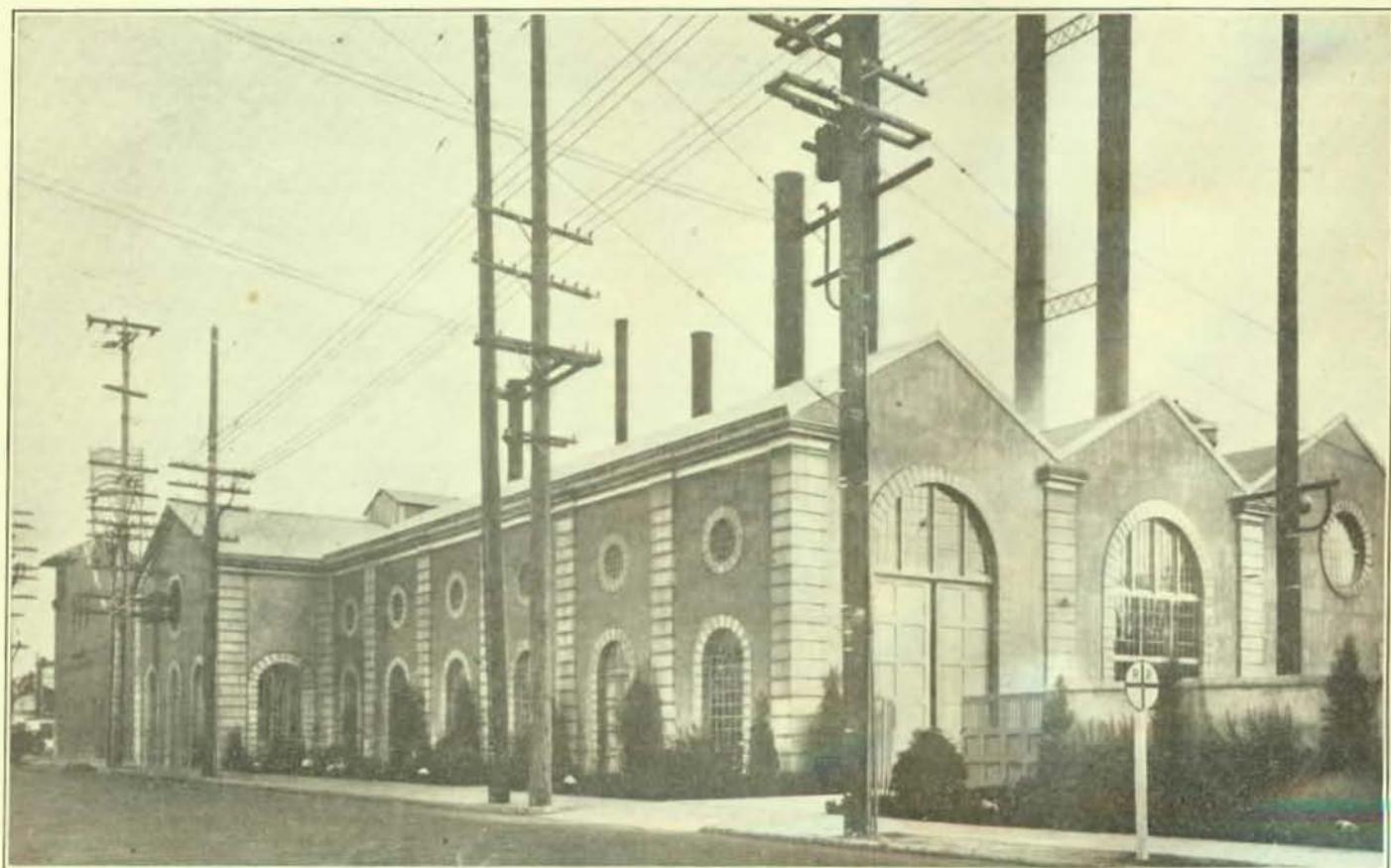
during the coming year. It will take about nine months to build and install the equipment, which will keep the Pasadena plant in the forefront of municipal light establishments.

Much of the success of the Municipal Light and Power Department which is now observing its twentieth anniversary, is due to its remarkably low rates and the support given the utility by the public. When the plant was started, the initial rate was eight cents per kilowatt, as compared to 12½ cents which was charged by its privately owned competitor. In 1910 the rate was reduced to seven cents and in 1911, the present day five-cent rate was established.

This price was maintained during the trying days of the World War when costs soared high. The city also has an extremely low power block rate, ranging from four cents to one cent per kilowatt. At the close of the past fiscal year the department had 27,429 meters in operation, as compared to 25,810 for 1925-26.

The dog is not only one of man's best friends, but may be his oldest, for ancient remains show that it was one of the first animals domesticated.

A physicist has calculated that if a million persons were to talk steadily and the energy of their voices were converted into heat, they would have to talk an hour and a half to produce enough heat to make a cup of tea.



ELECTRICAL WORKERS PLAY IMPORTANT PART IN WINNING, BUILDING AND OPERATING THIS MUNICIPALLY OWNED PLANT AT PASADENA

# Start Drive to Put More Babies to Work

AMERICA has set a new standard of production for the world. We produce, through our whirring, hurrying machinery, more goods, better goods, cheaper goods, and get them out faster than any nation, anywhere, anytime in the world's history.

Labor is beginning to have grave fears of overproduction. That is one reason for the 40-hour week. "Let us have more time to take this multiplied merchandise off the shelves of our stores and enjoy it," is the cry. Henry Ford institutes a 5-day week so his employees may have more time to wear out flivvers.

And in the factories machine processes are replacing human labor at a rapidly increasing rate. More goods, less jobs.

We all know this, know where this road leads.

Then WHY do we condone, at least by apathy, the increase in child labor? For an increase there is, and part of America's huge production is work of 14-year old children, taken out of school and put into factories. Why should American industry need child workers? Aren't there enough machines, enough adult workers looking for jobs?

But child workers are cheap. Their fingers are nimble. In the monotonous round of factory processes they may do their one or two little operations, repeated many times a day, just as well as an adult could. And—we suspect—children aren't apt to have these dangerous ideas about organization. At 14 years of age a child isn't likely to rebel against authority. He accepts what his parents, his teachers, and finally, his employers tell him.

### Pious Masks For Schemes

The National Association of Manufacturers and other selfish employer groups want child workers. It doesn't matter to them that they would deprive children of the benefits of the public schools, although they piously cite educational authorities to help bear out their claim that children should be allowed to leave school and go to work at 14. This is the conclusion of modern educational research, they declare. So they are out to break down the slight protection state laws give to child workers.

And in the state of Missouri they have already been successful. Two decisions rendered on September 27, 1926, by Attorney General Gentry hold unconstitutional certain features of the Missouri Child Labor Law enacted in 1921. These decisions are among the most serious setbacks that state child labor law has ever met, according to Wiley H. Swift, acting secretary of the National Child Labor Committee.

Gentry's first decision holds unconstitutional the law which prohibits the employment of children under 16 years of age in any occupation that is declared by the state industrial commissioner to be dangerous to health and morals.

Twenty-three states now have laws like this one, which, in addition to specifying certain occupations as dangerous to health and morals, give to some state authority the power to extend the list of such occupations and to prohibit employment of minors therein. Now the lobbyists of the Manufacturers' Association may cite Gentry's decision in attempt to break down these laws in other states.

### Children Easily Injured

A law of this sort is an aid to preventing accidents to child workers, for industry

kills or injures from two to three times as many children as adults in proportion to the number employed. There are industries and processes dangerous even for adults and doubly so for children who are naturally irresponsible and careless of the hazards around them. That injured children go out from the factories minus a finger—a hand—an arm—a leg or foot—facing years of blackened life with earning power curtailed is apparently of little consequence to Mr. Gentry or to the National Manufacturers' Association.

The second opinion holds unconstitutional the provision that no child under 14 years of age shall be employed except under a permit from the superintendent of public schools or other person designated by the board of education and then only upon certificate of a reputable physician and an affidavit of the parent or guardian of such child, so even this weak safeguard is broken down.

Practically every state now requires work permits of some kind, granted usually by school authorities, and the approved standard requires proof of age, completion of 8th grade, certificates of physical fitness and definite promise of employment.

These two laws were declared unconstitutional on the technical grounds that the legislature could not vest in other persons power which is vested alone in the legislature.

And it makes more of the children of Missouri available for labor in the cotton mills which are actively establishing themselves in the south—where there's plenty of cheap labor and few legal limits on the work week. Textile industries in New England have been hard-hit by the exodus to the south, in fact a national 8-hour law for men, women and children is advocated from no less a state than Mr. Coolidge's own Massachusetts, by Mrs. Edith N. Rogers, who appealed to the President recently to give his support to this measure. Not on humanitarian grounds, of course, but in the interest of Massachusetts industries.

"Massachusetts has the 48-hour law for women and children and she will never repeal it," Mrs. Rogers said. "That is long enough for people to work. Her textile industry is competing with southern states which have the 54-hour law, if any law at all, and which are nearer the raw product.

"Our textile industry may never get back to permanent prosperity unless all the competing states adopt humane working laws and unless we are granted better freight rates for the raw material."

Of course that's an argument of another color entirely and in the interest of his New England popularity (which, with the defeat of Senator Butler, looks to be sadly on the wane), Mr. Coolidge may give ear to such a plea.

### Enforced Competition With Adults

And for equally selfish reasons, if not for unselfish ones, organized labor must keep up the fight for legislation in the states prohibiting or regulating child labor—and must fight with all its strength defending what laws there are.

#### Why?

In the first place child workers are the children of working people.

In the second place, they become competitors of working people.

Why do children quit school at the age of 14 or sooner, and go to work in a fac-

tory? Economic necessity isn't all of the answer. Suppose the father is dead, leaving the mother with the burden of a large family to support? State aid must be invoked to help her. And if the state cannot help, it may at least see that the oldest son or daughter is in good physical condition, has a job in prospect and that one that will not injure him or her physically or morally, before a work permit is issued.

But many children who go to work are not absolutely needed to add to the family's earning power. Too often they just—go.

For instance Johnny isn't getting along well in school. He isn't quick or bright. He's failed to make his grade—and there's a stigma among children for the backward schoolboy. Johnny's getting tall and lanky, but he'll have to crowd his long legs under a seventh grade desk and get acquainted with a new bunch of children, all younger than he is. He doesn't like the teacher—she failed him, the mean old cat! Tom Barnes went to work in a factory and he says it's easier than school and he has new clothes and lots of spending money.

So Johnny says, "Pa, can I quit school and go to work? They always want more boys...."

Ma says, "I want Johnny to have an education but it's some job getting him up in the morning and off to school. The teacher's sore at him. I don't think he learns much..."

And eventually Pa says, "Well, I guess it won't hurt the kid to try earning his own living."

And Johnny's education stops right there. At 14 years of age he's through learning. He picks up the small part of the factory operation that is his job in a short time, becomes adept at it and soon is earning as much as an adult worker. There's no premium on grown men in the cotton mills or factories. They don't use minds. What if a child comes to them with a stunted, half-formed brain?

As a matter of fact, it is the backward children, more than any others, who should be kept in school, at least until they have finished the eighth grade, and that is a precious low standard.

### Denies the Support Scheme

One of the very educators quoted by the Manufacturers' Association in support of their claims, Mrs. Helen Thompson Wooley, formerly director of the Vocational Bureau of Cincinnati, and at present director of the Institute of Child Welfare Research at Columbia University, repudiates the twisting of her statements by the manufacturers with this vigorous opinion:

"It is true that the majority of children who leave school under 16 are the mentally inferior group, and failure in school is a more compelling motive than economic pressure in sending them into industry. But the conclusion to which this point is that our school system must be re-organized, not that these children should be allowed to work. If the school as at present constituted has nothing to offer this large group of children between 14 and 16 who cannot profit by the usual academic work, then it must introduce a new type of education that will give them something of value. Inferior children mature later than do normal and superior children, and it is doubly important to protect them from undue strain and responsibilities during this period of their most rapid physi-

(Continued on page 49)



lished in the last WORKER seem almost too good to be true. But such conditions are a goal to be reached by all of us and mark a stepping-stone of progress for us in the effete east.

Boost the forty-hour week.

This is the season at which commences the favorite indoor sport often indulged in by certain employers of cutting a lot of detail out of the job, and to you who are unfamiliar with the game, the layout goes somewhat like this: The owners or promoters engage the architect and he draws up the plans with a bang-up electric job included, worth, we may say, \$100,000, and sends out for bids. Then the contractors figure down to the last screw and the smart boy slips around to the owner or promoter and shows them how to eliminate a lot of the electric apparatus and substitute in the work and save perhaps a quarter on the job, and as saving money is one thing these people want to do nothing else but, naturally his bid goes in that way and he lands the job and the dear Brothers get it in the neck as per usual. There is, in fact, no closed season for this amusing game.

When Noah let out the contracts on the Ark the successful bidder called his men together at the start of the job and spoke thusly, "Now, boys, I had to take this job dirt cheap in order to get it away from the other fellows and the way it stands I expect to lose money, but I wanted to keep you fellows going, so now you just jump right in and hit the ball and walk right along with it to help me out, and you know I always treat you right," etc., and so on. Naturally, this made a powerful impression on the employees and they spoke among themselves like this, "The boss says he tries to keep us going and if we get out with him it will be hard for some of us to land, and besides the talk is around he is on the inside of a big job over in Babylon, so let's jump in and do as much as we can so it will just get by the inspector and not pay too much attention to the 4 p. m. whistle and help the old boy out." Human nature has changed very little in the past million years. Workers who fall for this old stuff only kid themselves and help to perpetuate an industrial evil.

The next highest bidder has in a figure that more nearly allows for a fair labor cost and a fair margin of profit to himself, and his labor would have likewise been employed. Cheaperening the industry is like setting the clock back to save time. Competition is supposed to be the soul of trade; then trade must have black soul at times.

The cry is often heard, "Too many in the business." I grant you that with every male child striving to become an Edison or Atwater Kent, but did you not know there are a few more medicos and barristers each year and do you notice doctors' or lawyers' fees coming down? No. Here, evidently, the laws of supply and demand do not operate. Ask your doctor or lawyer if he is organized. Naturally he will not call his association a union, and a prize will be awarded to the finder of an out-and-out rat in their professions. Then 100 per cent in the electrical field in North America, nothing less, is the way to accomplish results favorable to us. If the boys back in '93, who started us off, could see us now! Well, of course, we have grown to a good size, but where ought we to be? You know as well as I do we should be at least four times as great. Why aren't we? You know the answer. Believe me or not we have got to wake up. The officers of the International are powerless unless the rank and file will go to the bat. Ten years off is not

## WINNIPEG OFFERS A SUGGESTION ABOUT AN UNWORKED FIELD: ELECTRICAL NIGHTS' ENTERTAINMENT

Every man has a story to tell—his own. Everyone has had adventures that thrill and throb with life. Some of these life experiences of some men get in between covers of books and are called literature, novels, tales or short stories.

But very, very few of the adventures and dramas of the electrical worker—or for that matter of the worker in any craft—have ever been written down. They are reserved for club sessions of the bunch in the back room after the union meeting—maybe.

Therefore, now comes Irwin, of Winnipeg, with the suggestion that these men who feel the itch to relate their most terrifying, or amusing, or glorious, or horrible experience, send them into the JOURNAL.

Read all about his plan in his letter from Local Union No. 1037 in this issue.

Please let us say that the editor will be hospitable to all these tales of the electrical trade—let's call them Electrical Nights' Entertainment—and will print as many as he possibly can—without violating confidences.

the time except as it may be the time for the obsequies of the dear departed.

Work is slack at present in this locality and prospects not brilliant. The Conowingo project will open up this year and that will give the I. C. S. and Polytech boys a fine chance to do their stuff (Woolworth and Kresge take note). Also the "high line" boys will roll in from the great open spaces. All in all, the stage seems perfectly set for Messrs. S. & W., for this "normalcy" is great stuff and eventually works around to the Bryan platform of 16 to 1 (sixteen men for one job).

A tip to all organizers: just hand the prospect a copy of the WORKER, and let nature take its course.

S. G. HATTON.

### L. U. NO. 33, NEW CASTLE, PA.

Editor:

In my last letter I wrote about our Brother linemen. Well, they all went west. After the pin was pulled they all dropped out of the local. We are having good meetings and trying to build up again.

Work is steady, no rush on. The new Masonic Temple has been completed, and it is a beautiful building. Our new Castleton Hotel is under way, and our home boys are working on it. The new year doesn't promise much in building at this time.

The labor union has built up 100 per cent, and how glad I am to say this. I am sure it will help the wireman and all other trades. Let us all this New Year talk to the laborer. Invite him to join us and make up a strong organization. I ask every one to call on me, except the doctors, and they come without calling.

I wish all the boys a Happy New Year. In behalf of Local No. 33 I send best wishes to the Florida boys who lost all their property in the storm. May you all have better homes to spend Christmas holidays in next year.

CHARLES ALLEN.

### L. U. NOS. 39 AND 78, CLEVELAND, OHIO

Editor:

There have been some radical changes in working conditions here since my last letter, and the outlook is not at all favorable for the winter. There is a decided falling off of work in the building trades in all branches. Factories are shut down completely or just keeping a few men to make

general repairs, and the streets are filled daily with unemployed men, and no small number of these idle men are beseeching the daily papers to find work for them.

The Municipal Light Company has had one of the most prosperous years in its history. It did considerable underground work this past summer and has added about 1,000 white way lamps on some of our principal thoroughfare. I look forward to considerably more work of this type this coming summer. I believe the streets just completed will be an inspiration to other merchants to petition the city officials to make the same improvements on their streets, until every main thoroughfare is lighted with the white way system.

The call department has been very busy this past two months, as there were some extra gangs added and this has kept General St. Clair right on his toes all the time, keeping the men supplied with work. Considerable work has been added to this department by the installation of traffic signals. They have just completed the first main thoroughfare with these traffic lights, and many more are to follow, so the outlook is most favorable for the balance of the winter for this department.

We were all shocked to hear of the sudden and untimely death of Brother Joseph Cuddy, who was found dead in bed on the morning of December 18. Brother Cuddy was well known to many of the old-time linemen. For the past few years he was not able to do line work, but was employed at ground work for the Municipal Light. Brother Cuddy was a regular fellow, and we were all sad to hear of his demise, and in the shocking way that it came. I hope he has earned his eternal reward.

It seems that the labor movement is in for a bitter fight this coming spring when they come up for a renewal of contracts. The labor haters and destructionists, better known as the citizens' committee, comprised of some of our leading men in this community, are going to take a hand in the game and try to force the open shop in the building trades. These prominent gentlemen, some of whom have never done a day's work in their lives, have taken it upon themselves to show to the public of this city that the wages are too high and that the high cost of home building is laid at the doors of the union men employed in the building industry.

Now while their argument is too silly to take seriously, still, let it be understood

that if they can get away with it they are going to work havoc with this city and that is just what we want to prevent, and there is only one way to accomplish this—get behind one another in unified action on the part of every union man, regardless of what craft, and fight with soul and body to show our resentment. These eminent gentlemen call themselves a citizens' committee and may I ask who authorized them to organize in the first place, and who applied this cognomen to their organization? Please tell the public of this city what part the union men and their families play in this community. Are we not also citizens? Is it an implied fact that because we have joined a labor union that we are to be, or already are, ostracized from civil society? Because we belong to an organization to make a living wage for our dependents, have we not got the same rights that you have? Some of you lawyers who belong to this committee, have you not got your bar association, and pray, what for? To protect your profession, of course. There are some bankers on this committee. Have you not got your associations or union, if we may call it such? What for? Your protection? Yes, indeed, and your organizations, no matter how many of them, are associated in this drive against organized labor.

You say that your committee is going to investigate the workings of the labor unions. All right, go ahead; but on one condition, will your organizations subject themselves to an impartial committee investigation of your various unions? Will you throw open your books to the general public and there let us common people find out how you come to make your 100 per cent profit or in some cases 200 to 300 per cent in many of your transactions? Sure, if you will consent to this investigation then we will gladly permit you to find out why some of our men make from \$6 to \$12 a day for about eight months out of every twelve.

It strikes me rather peculiarly that we union men go right along patronizing you men in business, leaving the dollars that you are scrutinizing so closely that we are forced to leave some of it with you, and then when you go to your citizens' committee meetings there debate with your fellow colleagues that the union men in this city are getting too high wages and you will have to lap off a few dollars a day, so that by so doing we can increase your profits 15 or 20 per cent more.

It is distressing to note the personnel of this committee. Many of these men are well known to most of us and they represent many different kinds of business, and have been in the public and political eye for a goodly number of years, and now to think that when you have been a little prosperous after being the recipient of many favors at the hands of these same union men and their friends, today you same ingrates would drag them into the mire when it took them years of toil and sacrifice to get somewhere near a decent standard of living.

So, my union colleagues, let us stand united and meet the enemy face to face; let us leave our grievances at home, put the ding dongs on the shelf, and let each and every man stand about face, whether we are directly affected or not, for if this committee is successful in forcing the open shop in the building trades every other union in this city is going to be dealt with accordingly. So their fight is ours. Each and every union man is obligated to do his utmost to fight for the principles that he thinks are right or at least did when he joined his respective union, and after making this fighting effort and should it go

## Salem Studies Radio

By CHARLES L. REED,  
Educational Director

Radio reception and transmission is now being studied by the members of Local 259, International Brotherhood of Electrical Workers, and the first of a series of eight lectures was held Tuesday evening, November 30, at the meeting hall of the union, 145 Essex St.

The course is conducted by the Division of University Extension of the Department of Education of the Commonwealth of Massachusetts. The instructor is Mr. Henry Kurth, an engineer with the Boston Edison Company. Text books are used by the class and furnished by the state for the enrollment fee which is \$3.00. The title of the book is "Practical Radio" and was written by James A. Moyer and John F. Wostel and published by McGraw-Hill Book Company, Inc., of New York City, 1926.

There will be written examinations at the middle and close of the course and those qualifying will be given certificates by the state.

The idea behind the course is to give the members of Local 259 an insight into radio so that when the time comes we will be able to control the installation and servicing of radio receiving sets. At present this work is done by young men who are not electrical workers, have not licenses, and are not members of the union. These workers are often inefficient and are a detriment to the trade. We intend that our members shall understand and control radio and in order to do this it is necessary that our members get peped up on the latest dope.

Having the knowledge of electricity that our members have it is expected that great progress will be made in the eight lectures but if necessary we will have eight more. Needless to say the members of the class are sold on the idea and were enthusiastic after the first meeting. And who can say that the union isn't doing something for its members?

against unionism, then it can be said: "You have fought the good fight; you have kept the faith; you have run your course."

J. C. ROACH.

## L. U. NO. 40, HOLLYWOOD, CALIF. Editor:

Months of organizing by Local No. 37, I. A. T. S. E., Local No. 1692, Carpenters and Joiners of America, Local 582, Painters and Decorators, and Local No. 40, I. B. E. W., came to a climax on December 1, 1926.

International Presidents Canavan, I. A. T. S. E., Hutcheson of the Carpenters, Hedrick of the Painters, Weber of the Musicians, and Noonan of the Electrical Workers, headed by President Green of the A. F. of L., delivered an ultimatum to the moving picture industry, to the effect that the industry would be expected to correct the many just grievances of their employees. In the event recognition was not granted the men, an international general strike of the I. A. T. S. E. in the United States and Canada, actively supported by the four international unions involved and

sanctioned by the A. F. of L., would occur on December 1, 1926.

This strike would tie up practically all picture houses and theatres where pictures are shown, in the United States and Canada. In the face of this situation the heads of the moving picture industry in New York agreed to consider and correct many grievances.

Committees to carry out the agreement were appointed by the moving picture interests and international unions involved. The five international presidents compose the committee representing the men. Had the strike materialized the same united action would have been taken by the five locals in Hollywood.

The dispute of Local Union No. 37, I. A. T. S. E., and Local Union No. 40, I. B. E. W., over their respective jurisdiction, has been satisfactorily settled. Much credit is due International Executive Board Member Cleve Beck of the I. A. T. S. E., International Vice President Vickers, I. B., Organizer Leon Shook, and the entire membership of Local Union No. 40, for the sensible settlement of this question.

Previous to December 1, 1926, the four local unions put on an organizing campaign, all holding large open meetings. Two joint meetings of the combined unions resulted in a turnout of over two thousand at each meeting. Organizers Muir of the Carpenters, Beck of the I. A. T. S. E., Emes of the Painters, Dale of the A. F. of L., and Shook of the Electrical Workers delivered very effective speeches at all meetings. As a result of the campaign the locals gained in membership, Local No. 37, I. A. T. S. E., enlarged membership making it the second largest local in their international organization.

The action taken by the International President in this matter has been unusual and may appear to many as radical. But the studios of Hollywood, like ancient Rome, levy tribute on the world and any movement to improve the wages and working conditions of studio employees must also be world wide. We feel we are fortunate in having men heading our internationals who are capable of handling big questions in a big way.

The organizing of the studios will serve as an object lesson to the unorganized everywhere. Adding another large body of workers to the many now organized in Los Angeles, it will also assist Los Angeles in living down its reputation as the Home of the Open Shop.

Local No. 40, on the behalf of the other locals involved, wishes to express our thanks and appreciation to the International Officers and members for the way in which they have assisted us. Our annual election resulted as follows: President, W. F. Moor; vice president, M. Walters; recording secretary, T. R. Hanton; first inspector, J. W. Cook; second inspector, D. J. Lilly; treasurer, Wm. O'Day; foreman, S. Smith; trustee, J. W. Cook; executive board, W. F. Moor, J. Tait, T. Saunders, R. J. King, J. Ward, G. W. Calkins, J. E. Stoll; press secretary, J. E. Stoll; financial secretary and business agent, G. F. Reid.

Drawing on the experiences of the past year the officers and members of Local No. 40 will enter the New Year convinced that there is more truth in the old saying, "God helps those who organize and help themselves."

J. E. S.

Japanese scientists are using the method of marking birds with aluminum bands to study their habits and migrations.

**L. U. NO. 42, UTICA, N. Y.**

Editor:

Local 42 has been absent from the correspondence columns for quite a number of months due to the laziness of the press secretary, which same is myself.

Work is not plentiful at present and has not been for some time. Quite a large percentage of our members have left town for other jobs; a number of the boys have taken travelers and are working Syracuse, N. Y. The Adirondack Power Co. is building a line from Inghams Mills to Utica, N. Y. This will be about 30 miles in length. Understand they have a large crew on the job so I suppose it will not last very long.

The trolley work is quiet as usual, just the regular gangs doing maintenance work. We have an old high tension line to take down this winter, but do not think any extra linemen will be put on, as most of the work will be done at odd times when the regular work is caught up. The Light Co. is starting to lay off, so I suppose it will be quiet there until spring. One gang was laid off this week and we hear more are slated to go next. That is rather a poor Christmas present to hand a man. Mother Bell has a big job to do here but that does not mean anything to us, as they use their own men.

Would not advise any Brothers traveling this way to drop off here, as it looks like a slack winter in this locality for linemen. If you should be headed this way, better send a card to the local and find out conditions before leaving your sidedoor pullman. Also the secretary is financially embarrassed as the result of being laid up with an infected finger for the last five weeks. Nuff sed. Might also add that we have but a few members at present and the local is somewhat in the same state.

E. W. TERRELL.

**L. U. NO. 51, PEORIA, ILL.**

Editor:

Here we are at the most joyous season of the year, Christmas time, when it makes one's heart feel good to give, and makes the old and young alike feel happy.

Just received the *WORKER* today and every day in every way it grows, letter by letter. Just an even 49 letters in for the month of December, unless we give our good Brother Bachie credit for doing a doubling act and that would make 50. I hope to see that many, at least, each month during 1927. Wouldn't it be fine if in some edition Brother Bugs had a big "Help Wanted" ad on the front page asking for printers, etc. There are lots of real good articles in the *WORKER* every month if the boys will only take time to read them, and Peoria is full of Scaramouche for a week or so after each edition. Every one seems to take an interest in the stories, so here is hoping they are continued.

Things in Peoria at present are in good shape, everyone working and plenty of work in sight for some few months yet.

Thursday, December 23, is meeting night and Brother Fred Huse, of Springfield, is coming over and explain to us all about the advisory council. I suppose if it is gilt edge will buy some of it, but will tell you more about it next month. One thing about it that sounds good to me is the fact that you can get men for a job that have their cards and no doubt it will do away with the practice of taking out a card just to work on the job and then drop it as soon as they leave, and when they come back we welcome them with open arms and give them another card to do the same thing again. Sometimes it looks as

though investigating committees fail to do their stuff and just merely sign the application and take a chance on the man being O. K. and oftentimes it turns out wrong.

Does any one who happens to read this article know the whereabouts of Jim Kelly, cable splicer and lineman? Last time heard of was in 1911, working for the Iowa Bell Telephone Company at Eagle Grove, Iowa, and from there he left for Texas. Would consider it a great favor if some one will tell me where he is. Would like to find Kelly for friendship's sake. He carried a card out of Local No. 55, Des Moines.

I will now take pleasure in introducing to you another installment of our membership:

The man who always says "Raise yer," our little ex-foreman, E. J. Fraser. E. J. (Happy) Fraser, initiated October 24, 1915, Local Union No. 55, Des Moines, Iowa.

Not the most jolly, L. M. Holly. L. M. Holly, initiated March 6, 1916, L. U. No. 615, Cedar Rapids, Iowa. Lineman hot stick gang, C. I. L. Co.

The man who buys all girls ribbons, our traveling Brother, Mike Fitzgibbons. Mike Fitzgibbons, initiated July 28, 1916, Local Union No. 23, St. Paul, Minn.

The man who produces and earns, our ex-president, Thomas Burns. Thomas Burns, initiated November 19, 1917, Local Union No. 51, Peoria, Ill. Hayburner on Shorty Matlin's crew, C. I. L. Co.

His personality will make him rise; for your approval Sidney Weise. Sidney Weise, initiated October 1, 1918, Local Union No. 24.

You tell him, George. I can't for laughin', our long, slim Brother, Thomas Gavin. Thomas Gavin, initiated April 21, 1919, Local Union No. 51, Peoria, Ill. Trouble hunter, C. I. L. Co.

The boy wonder will not eat an onion, introducing to you H. Runyan. H. Runyan, initiated July 18, 1919, Local Union No. 146, Decatur, Ill. Lineman, service wagon, C. I. L. Co.

Punch boards will get him in a pickle, Mayor Muehler's assistant, A. Nichol. A. Nichol, initiated July 21, 1919, Local Union No. 51, Peoria. Lineman, city.

Our president is mighty fine. Get acquainted with E. Madine. E. Madine, initiated November 17, 1919, Local Union No. 51, Peoria, Ill. President No. 51. Patrolman, C. I. L. Co.

No man he harms, Ray Barnes. Ray Barnes, initiated February 16, 1920, Local Union No. 51, Peoria. Cable splicer, C. I. L. Co.

HOLLY.

**L. U. NO. 52, NEWARK, N. J.**

Editor:

The entertainment committee has sent out the following communication:

"Once again the time has come for our annual reunion, and this year we expect to see every member with his wife or sweetheart present at the reception and ball of the Relief Association of Local 52, which will be held at Krueger's Auditorium on Friday, February 4, 1927. We are enclosing two tickets, which we trust you will use yourself or have some friend use them.

"Just a few words, and we will try to impress upon you, that not only your committee is morally responsible, but as you are part of this great movement, you are likewise responsible to the extent of making this a huge success financially. No one knows who will be the next in our ranks, through sickness or accident, who will be in need of some relief, and furthermore it should make each and every one of us happy to think that we could help our fellow worker or his

family in time of need, if it be in only a small way.

"Once again we appeal to you for your 100 per cent support to make this affair a success, so get all your glad rags ready to be with us for a jolly good time.

"Please make all returns as promptly as possible, same to be made payable to the Electrical Workers Local No. 52, Relief Fund.

"Apprentices may make their returns for tickets on January 8, 1927.

"Trusting to have you with us, we beg to remain,

"Fraternally yours,  
"ENTERTAINMENT COMMITTEE."

**L. U. NO. 53, KANSAS CITY, MO.**

Editor:

Things are still pretty quiet in Kansas City; not much work going on and nothing much in sight. Looks like the companies have all the poles set and wires tied in.

Had the misfortune to lose one of our members in the past month, Brother John Sherry, who died suddenly Sunday, December 5, from a hemorrhage. Brother Sherry was only a linemen's helper but he had a five-year card and was glad to say paid up and his widow received the \$1,000 check in less than a week's time. Pretty nice. Some of the other Brothers had some misfortune along that line recently. Brother Wade lost his wife after a long illness and Brother Gregg lost his father, and now our worthy president, Brother Ballard, has just lost his mother. Local Union No. 53 extends its heartfelt sympathy to all the above Brothers.

Guess we will lose Brother H. B. Powers soon, but in a better way, as he has been elected sheriff of Wyandotte County, Kans., and takes office January 12, 1927. Brother Powers had the support of organized labor and the better class of citizens and defeated his opponent by about 5,000 votes—not volts. His opponent, who is a six-footer, said Brother Powers, a five-footer, was too small for the job, but Harry is a little two-fisted he-man and if he don't make as good a sheriff as he did an electrical worker we miss our guess.

The Brothers from Independence are still 100 per cent and attend meetings pretty regularly, but don't have much to say except Brother Jim Wells, who spouts off occasionally. Brother Leo Daniels greets everybody with a smile and a howdy do before meeting and then he is through for the evening; he don't even "second the motion." Brother Phippen hasn't been duck hunting since he got seasick and turned over the boat and got good and soaked. He managed to get home O. K. with the assistance of Brothers Bill Burkley and Joe Le Laney. Brother James Hannon has been working pretty steadily lately, but Christmas is coming and James is about due for a little party and another week's vacation. Better watch Wes Mischlich and Burt Neal, though, this time.

The weather is pretty cold here now; down to zero this morning, so it is good weather to stay home and toast the shins.

JOSEPH CLOUGHLEY.

**L. U. NO. 60, SAN ANTONIO, TEXAS**

Editor:

It has been almost five years since I last wrote a short letter to the *WORKER*, but you see it was like this. I went in business down the magic valley, The Home of the Texas Grape and High Prices, and for four years I was engaged in this occupation. So busy was I that I dropped my card, not thinking the foolish thing I was doing; but

I did. Things went on fine until the bottom of the crops dropped out and I fell out with it. What was I to do? Nothing else but to come to Local 60 and ask for forgiveness, but business is business and so I had to come in as a new member, pay up the necessary initiation fee and be a member once more. Well, I did, and one night I was obligated and things went on fine and was glad to be with the boys I once worked with. But the following meeting night. Oh Lawdy, the boys have a contraption rigged up somehow as to make everything around you shocky. I first was placed in a coffin, then took an aeroplane ride and then the boys said I danced a new wrinkle on the Charleston steps and, believe me, I was glad when it was over with. One Brother we call Mr. Chile, said he was sick the next day, for the laugh I furnished was so great as to hurt his sides. Nevertheless I was not the only one to dance to a big crowd on a charged rug.

Getting back to No. 60 I will say that the local has a good bunch of fellows. Hizzonor, Ed. Eifler, still wields the gavel and he does wield a mean one, too.

I received a copy of the WORKER a few days ago and I want to tell you the funny part about the magazine. My boss—that is—shh—my wife—called me to supper not less than a half dozen times before I did lay the WORKER down and put my feet under the table. But I noticed her hurry about something and sure enough she grabbed the WORKER and turned it to some page and started to read. After I pulled off the empty nose bag I glanced over her shoulders at what she was reading. She was reading on page 542, the Woman's Work. Hang it if women can find something to read in the WORKER it goes to prove the magazine we help publish finds a place in the hearts of the wives of wire twisters.

Now, Mr. Editor, I have no authority to write this for the local, but I am writing this as a personal thanks to the Brotherhood and my only wish is that some of the Brothers will find a little time to write a few letters and you publish them. I am sure that the WORKER will have lots of good material to furnish us with a different angle of our ways and means of expressing our appreciation of the book that costs us nothing, and still we don't read.

As I said, I was only going to drop you a few lines and if this don't find its way into the waste basket it will be where I will be very delighted to find it—in the WORKER.

G. L. MONSIVE.

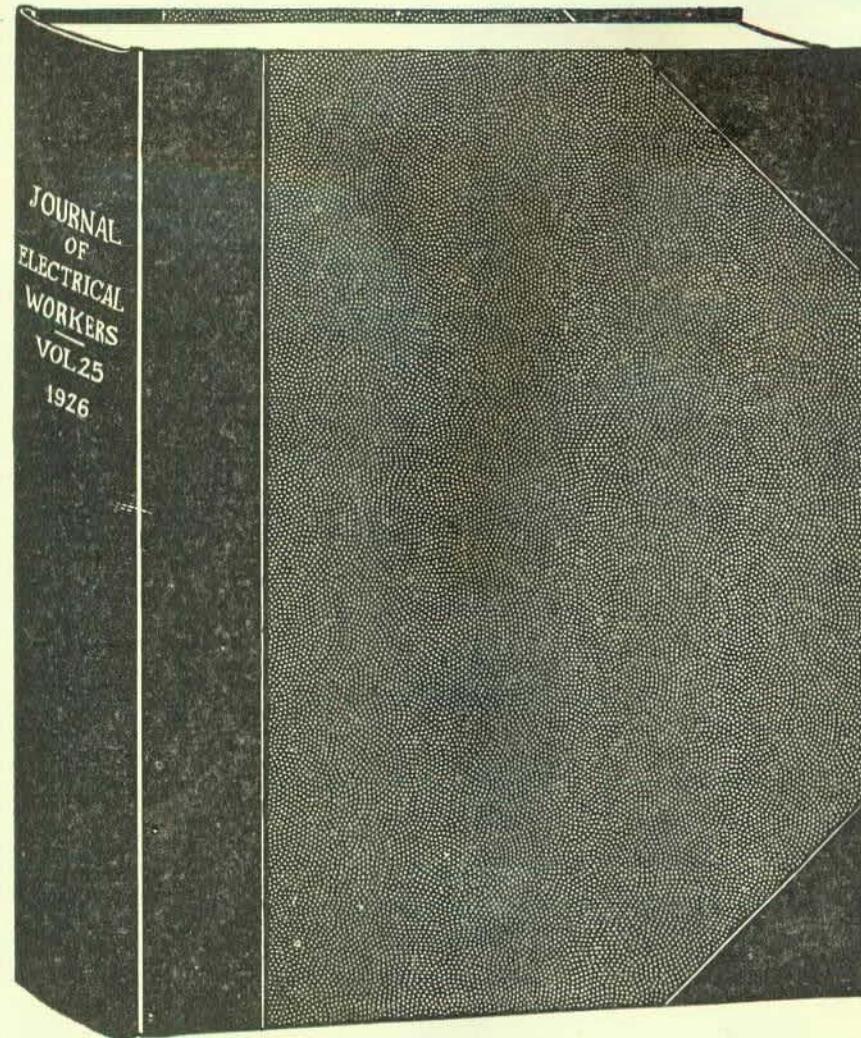
#### L. U. NO. 62, YOUNGSTOWN, OHIO

Editor:

Before you go on strike be sure you have done every possible thing to get a settlement, and also have a just cause for striking. Strikes are easily called but hard to win; a strike might be won, so to speak, but if the chain was thoroughly examined after the strike ten chances to one you would find a link not as solid as it was before.

Now one year ago today Red Hamilton and myself were traveling through Georgia, and landed in Florida where we spent the winter, therefore I say hello to St. Petersburg. Locals 308 and 705, the linemen keep on batting. Good union men can do a lot of good for the cause if they want to, no matter how small a town they may be in. A dollar well spent for union made goods is a dollar well earned. If for instance the garment workers are on strike, and an appeal comes in for aid from them, some fellow gets up, makes a motion to donate \$25.00, it carries, then he and twenty others

## LAST CALL! R. S. V. P.



**C**LUSTERING round the daily job and the collective life of the union, are many pleasant associations which are recorded alone by the ELECTRICAL WORKERS' JOURNAL. These can be preserved best only in a bound volume. Such a volume (limited number of sets) is to be made available to local unions and local union members for \$3.75 postpaid.

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¶Too often local libraries fail to have union literature on hand, not because they don't want it, but because they can't get it.

Send check at once. Orders will be filled in order of their reception.

**ELECTRICAL WORKERS JOURNAL**

Machinists Bldg.,

WASHINGTON, D. C.

that voted for it go next day, and buy a scab Hart Schaffner and Marx suit of clothes. Just think what you are doing. You are scabbing on them, your union earned money you voted to give them the day before. Stop and think what you are doing. You sure know better.

Our superintendent, an old timer, William Osborn, was killed in his automobile by a railroad train the day before Armistice Day. We sent him to his last resting place, Bristol, Tenn. He had been here only a short time and was well liked.

Now I think something should be done to stop these wrench and hammer linemen who are floating the country; by doing this they are setting a bad example, because some of the companies are asking the men to furnish their own wrench and if this is allowed to continue, it will not be many years before all the companies will compel the lineman to furnish the wrench. To furnish a wrench is not part of a lineman's kit, and if it comes about, it is no one's fault but the fellows themselves. Also I can hardly blame the companies for not wanting to furnish all the fellows who have cars with a wrench or two. I ran into a job in Florida last winter, where you were supposed to furnish saw and chisel. Now a lineman would look good floating the country with a mess of pike poles. I would suggest the I. O. write all the locals on the subject. I am pulling the plugs and wishing the I. B. E. W. success.

HERMAN DEROLPH,  
Transfer, Pa.

#### L. U. NO. 65, BUTTE, MONT.

Editor:

A cold wave hit this vicinity December 12; a big snow storm and the mercury dropped to 10 below and lower in some parts. This is the first zero weather we have had for over eight months, which speaks very well for this country.

Work is fairly good yet. The A. C. M. Mining Co. are employing a large number of our members, and we hope that it stays good all winter.

A number of the boys who were on the toll line all summer and fall are traveling to the four ways looking for other jobs for the winter.

We will hold election of officers for the coming year on Friday night, December 17, and that will be the last meeting night this year owing to the fact that Christmas and New Year's Eve fall on the last two meeting nights of the month.

There has been a little misunderstanding between the iron workers and L. U. No. 65 over who will run the electric cranes that are being installed now at the new hoist for the Belmont and Mountain Core Miners, but we were given jurisdiction over this work by the A. F. of L., and look for an early settlement.

I am sorry to say there is not much to write about this time, everything seems to be going on very smoothly.

People here seem to be doing a great deal of Christmas shopping, so there must be some money left in the old town.

JOSEPH M. DUREL.

#### L. U. NO. 67, QUINCY, ILL.

Editor:

By the time this letter is read by the Brothers, the New Year will be already started. Now, Brothers, let us make this year of 1927 better than 1926. But the question is, How can we do it? The answer in my mind is to look back over the past

year and see if there is anything that you can do to improve on, such as coming to the meetings and offering suggestions that would benefit the Brothers; paying dues promptly, which would relieve the secretary of much work and you of a lot of worry, would be one way for some of the Brothers to make things better.

Now in regard to work. In my experience as an electrical worker I have watched a number of different crafts of tradesmen and find there is a vast difference in men. Some work on jobs just like the work belongs to them, while others work just because they get paid on Saturday. If the Brothers would only realize that it is the people who pay for our work, maybe working conditions would be better for all. Do not forget the people pay a little extra to the contractors for us being on the job. So just a few suggestions for the coming year:

Don't find fault with the other fellow; look at your own faults.

Try to do as much as you can and not as little as you can.

Don't put off until tomorrow something you should have done today.

Be loyal to those who have trusted you.

Last but not least, have the necessary training and education, which will enable you to stand at the head in your line of work.

Look this over carefully and see if there is something you can pick out. If not, you have been everything that an electrical worker is supposed to be. Now, Brother, these are my ideas of shooting square with everybody concerned in labor.

Tonight is our regular meeting night and we will have election of officers. In my next letter I may be able to tell more about the conditions of work, but just at present it is dropping off.

R. H. LUBBERING.

#### L. U. NO. 98, PHILADELPHIA, PA.

Editor:

We are coming to the end of our organizing campaign, and we feel that we were successful in doubling our membership. We now have our men placed in every shop and industrial plant in the city of Philadelphia. Each and every one of these men are educating the non-union men in the shops in the principles and aims of organized labor. We feel that in a reasonable length of time Philadelphia will be a closed shop town for our craft.

Non-union contractors, who have been opposed to organized labor for years, are now beginning to negotiate with our representatives in regard to closing their shops. We feel certain that by spring our organization will be composed of all the electrical workers in this city, making Local Union No. 98 organized to the extent of 100 per cent in the town.

Our new members are becoming enthusiastic over the organization and are bringing in new candidates every week. Men who thought they never needed a union card are beginning to realize the situation here and are inquiring about membership. With this condition existing and spreading we feel certain that the work of the organizing committee was not in vain, and every member of our local union has profited by the campaign both morally and financially.

I suppose this may be a surprise to some of the Brothers in other cities where rates and conditions were superior to Philadelphia, but we are making great changes in this city from the point of organization.

Philadelphia was often spoken of with scorn by some fellows in other cities. Philadelphia resented these remarks, and is

now up and doing something for the local.

In towns where they have 100 per cent organizations it will seem easy to be a member of that organization, but in towns such as Philadelphia, where the non-organized are in the majority, it is a credit to a man to carry a card when he realizes that a vast majority are always ready to compete against him, and underbid him in his rate of wages.

When men carry cards under these conditions and fight gallantly to educate competitors in labor ideals they are true union men and deserving of praise and not scorn. These men in Philadelphia will reach their goal in a very short time, and will prove that an organized minority is superior to an unorganized majority, and will put Philadelphia on the map not merely as a great city, but a great union city and a home of the organized.

LOCAL UNION NO. 98'S BROADCASTER.

#### L. U. NO. 102, PATERSON, N. J.

Editor:

Gosh! Ain't it tough? Marie has gone back to Roumania and not another front page thrill in sight. Yet, before this goes to press, anything can happen. Thank Heavens, we can always fall back on the Hall-Mills case. Have you noticed it, too? I mean this rapid fire season of thrills we're living in—Trudy's channel dip; Dempsey's Waterloo, Old Man Alexander in the box, Notre Dame, the Queen herself and a host of lesser celebrities. A new name, face or deed and the papers go off on another spurt. Such is fame—a front page sensation today—forgotten tomorrow.

Of local fame, we have the Nimrods—Bert Fielding, brings down his partridge every time, except when he misses, then Ernie Binks throws his knife at it. And Andy Werlinger brings home the bacon in the form of a mud-hen now and then. Wait till deer season opens. We might invite the local to a venison supper. I say we might, for if Binkley misses with his knife, you'd better bring your own "Rain or Shine."

I wonder if Pete Hoedimacker is reading this at Brockway. Merry Xmas, Pete. Johnnie Vogal won your exalted seat on the executive board in a very close race. Max Voag came in strong for second, and my good friend George Dolson third, with several others following.

After Bill Walmsley built the Panama Canal, he got homesick for dear old Henry Street and so Congress was forced to secure another wire twister to fill his place.

So we were all sorry to see Roy Boggs depart for the Isthmus. But, I'm still hearing about that farewell dinner, Roy. Sorry I missed it. How is Christmas in Panama, old kid?

Bert still has his stocking hung up for that missing link. If you run across twins I want the other for a helper in the outdoor sub.

I hope work picks up before this. As a rule the parade doesn't start till just before Christmas, but this year the lay-offs come early.

Quite a number of the Brothers are on the mourner's bench, and not a thing in sight. A Christmas fund comes in handy in this line of work, I'll say.

A resolution was passed at our last call meeting to change our meeting night from every Thursday to the first and third Tuesdays of each month, executive board to meet every Tuesday evening. Meetings are at 8:00 p. m. as usual, but will be held upstairs in the Plumber's Hall from now on.

The many friends, throughout the Broth-

erhood, of the late Raymond Clark, president of Local No. 102, for the past five years, will be grieved to hear of his sudden demise, through an acute heart attack. Ray, who was in his sixtieth year, was an active leader of trade unionism till the very end.

Thursday evening, December 16, while attending the regular meeting of the vocational school advisory committee, with James F. Mason, principal of the school; Nicholas Cantolina, instructor of the electrical department; Peter Muse, business agent, and others, Brother Clark suddenly and without the slightest warning passed away. Every effort was made to revive him, but Ray's spirit had already departed to the great beyond. A resolution of condolence was passed at our next meeting and published in the "In Memoriam" page of this month's JOURNAL.

Those who knew and loved the man will agree that no resolution or message of mere words could express an iota of the deep personal loss we feel at this time, for Ray had that entire and charming simplicity of manner and mode of life which is the crowning result of the highest aspirations and the finest nature.

He would never compromise a principle, but he was always tolerant of honest differences of opinion. He had a large capacity for administration, clearness of vision, promptness, decision, and a thorough comprehension of what constituted efficient organization, and economical management.

He lived to see the right prevail. He lived to see progressive unionism triumph over industrial slavery, and there was great joy in his heart. There was no hour down to the very end when he would not turn aside from his numerous activities to preach the doctrine of co-operation, of the principles and faith upon which the progressive advancement of the Brotherhood rested and which all members of the organization should wear in their heart of hearts. May we not truly say that "Though a tower has fallen, a star is set"?

Jack Pardan, vice president, automatically succeeded to the presidency, and will doubtless devote himself to his new responsibilities. By this time he will be assisted by a vice president yet to be elected.

Peter Muse, business agent, is right on the job as usual, placing as many as possible, and doubtless conditions will be improved soon.

Were you at the filming of Japan and did you hear the lecture by Thomas Hallihan, one of our old members, who has returned from the "Isle of Cherry Blossoms" after an absence of two and one-half years?

It was immense, amusing, intellectual, entertaining, and deserves a host of better adjectives. Brother Hallihan is an electrical engineer, and a good one from what I hear. I don't know anything about engineering, but I do know a good speaker when I hear one. Therefore, I was not only surprised, but delighted with Tom's style of delivery. He not only displayed a graceful deftness with the King's English; not only exploded a number of myths concerning Japan but through all his lecture, you will agree with me, ran that happy and rare vein of humor, to which all human nature responds.

JIM TRUEMAN.



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### System Council No. 7 Speaks

Cleveland, Ohio  
Nov. 29, 1926.

To the Members of Locals  
affiliated with  
System Council No. 7, I. B. E. W.  
Brothers:

I have just looked over the November "WORKER" and failed to find a letter from any of our railroad locals.

Now, boys, if your local has a press secretary, find out why he does not send in letters to the "WORKER," and if your local has not a press secretary make it your business to attend your next meeting and find out why.

I have seen a few letters from some of our locals during the past year, but some of them have been missing altogether.

Now, Brothers, the "WORKER" is published for all electrical workers, the railroad men included, and if we want to know what our other locals are doing let's start by telling the world what WE are doing on the New York Central Lines.

We have one of the best agreements ever written for the railroad electrical worker and are continually trying to improve it, and if it is not lived up to in the jurisdiction of your local, it is the fault of the membership. If you have not a copy of the agreement, get one and study it and if there are any rules that you do not understand, write to the System Council office, and you will receive the correct interpretation.

Attend your meetings, make things lively. Give your press secretary something to write about and he will be glad to have a letter in every issue of the "WORKER" for 1927.

Hoping to see a letter from each local affiliated with System Council No. 7 during the next year,

I remain,  
Yours fraternally,  
R. D. JONES, Sec'y.

### L. U. NO. 103, BOSTON, MASS.

Editor:

My slogan for this letter is "Brevity," making up for the long letter last month. In closing last month's letter we were waiting for the decision of the Public Utilities Commission on our telephone "fracas." It came, and in our favor. As expected, the Telephone Company immediately appealed from their decision to the Supreme Court on December 28.

Assistant Attorney General Lovejoy for the Commission, J. H. Clark for the Telephone Company and Warren V. Taylor for the Statler Hotel interest and ours. The matter is coming up before the full bench early in January. We are given to understand business of this kind has preference over all other hearings. The Assistant Corporation Council of the City of Boston and Mayor Nichols' personal representative sat in at all hearings thus far and are with us. We are now "watchfully waiting."

The second week in January sees the annual meeting of the Boston Electrical Contractors' Association. We are more or less

interested, to see who will become its new officers, as it is with this group we are signed up as they are parties to the Council of Industrial Relations of the Electrical Construction Industry.

In closing I want to mention, while passing through historic Boston Common December 28, I saw three men having a very heated argument. On drawing closer where I could overhear the remarks and still not have my presence detected I discovered that three to be none other than International Vice President Smith and our two business agents, Regan and Capelle. I was quite surprised. Smith was trying to convince our business agents that there is no Santa Claus.

GOODY.

### L. U. NO. 106, JAMESTOWN, N. Y.

Editor:

Winter has set in, the old year has about run its course and it is time to stop and think what we as a local have done to better our conditions and the conditions of the trade in general. What have you done?

Work around here is very quiet, but nearly all of the boys are working.

On Saturday evening, January 29, at 7 p. m. at Hotel Samuels, the local will hold its annual dance and banquet for all of its members and their families on the same basis as they did last year, so it behooves each and every one to get in touch with Brother Harry Loop and get his tickets, so we can make reservations accordingly. Remember the date and place, and be on hand to help make it a memorable occasion.

Our meetings are well attended. The following officers were elected at the last meeting to look after its interests for the coming year: President, A. E. McManus; vice president, Briggee; recording secretary, Harry Loop; financial secretary, the old war horse, Frank J. Kruger; treasurer, Elmer Stromdahrt; foreman, Leslie Johnson; inspectors, Allen and Moffitt; trustee, S. C. Keller; delegates to Building Trades Council and central body, McLean, Keller, Bishop and McManus; executive board, McLean, Keller, Bishop, Allen, Briggee, Loop, Higley, Cole and Haglund; press secretary, William R. McLean. It behooves each and every member to get behind them and boost.

Brother A. E. McManus has the deep sympathy of the members of this local in the loss of his father-in-law, Mr. Fred Deering, at Mayville, N. Y.

Brother Vern Ploss has followed in the footsteps of Brothers Bishop and Sundquist by moving out on a farm. The neighbors will have to keep their chicken coops locked, as Vern certainly does like chicken. How about it Major?

Next meetings of the local will be January 24 and February 7. So be on hand to get first hand information. Enough said.

W. R. M.

### L. U. NO. 108, TAMPA, FLA.

Editor:

With Christmas gone and a New Year just around the corner, No. 108 is making preparations for the ensuing year, with hopes, of course, that it will bring us more prosperity than we have had the past year.

As we have told you before, things are very quiet in this section now, with no prospects of any new jobs of any importance coming on for some time, so any Brother contemplating a trip to "the Sunny South" should take notice and stay away until further notice, unless you have a good-sized grubstake "and a little to divide with some of us who are pressing concrete." However, if you should drop in town, come around

to see us. You are always welcome. Your card will be accepted and your name placed on the waiting list, which is all we can do for ourselves at present.

The new A. C. L. shops here went open shop so far as electrical work is concerned. Our business agent spent much time on the job, but was unable to get things right. They said they were going to put the job in in record time with 60 men, but they used from 80 to 85 men before the job was very far along. The new plant of the Southern Baking Company will be complete by the time this reaches the readers. The electrical work being done by Walter Knapp Company of New York, Miami, Tampa, Daytona Beach, and under the direct supervision of Brother Frank King, was a 100 per cent job. Wish we had several more like it starting here now.

A committee has been named by the Board of Trade for the reception and entertainment of the Hon. J. C. Grew, undersecretary of state, and Brother William Green, president of the A. F. of L., who will be the speakers at a joint meeting in the new Municipal Auditorium on January 14, at 8 p. m. Everybody is invited. Bachman's Million Dollar Band will furnish the music, and it will be an evening well spent for anyone, and especially the union man and his family.

Best wishes to all locals for the coming year.

H. S. B.

#### L. U. NO. 113, COLORADO SPRINGS, COLO.

Editor:

I have perused our late number of the WORKER and it truly is a fine one; much spice and timber to make a new man out of old stuff. And with a little introspection we can see much that is lacking in us for rounding out a more generally well informed electrician.

The season of festivities is with us and within a short time will have wrapped itself up in a blanket of snow, and depart once more into the far northland to be forgotten, because of the rush of other things. Why should the spirit of yuletide not scatter itself over the entire year and not wait to reward our efforts at the retiring time of each year? Why not seek conditions in this life, that the cheer and good fellowship could remain throughout the whole year and enjoy our labors, and share in the blessings they bring?

Why should some suffer and others roll in the security of a material life? Does Nature ask such questions? Is there a laxity in the whole scheme of life, or are we blind to the best in store for us? Should we prey upon life for the luxuries and not show a good example to others for our having been here? In passing this way we must be ever mindful. We need the product of our brother and should see to it that he secures the portion of happiness in producing it that we ask for ourselves. So by seeing that security is only had through service and that we as electricians are doing our bit in the mighty wheel of life, we should merit the same for our labors that the greatest mind desires for his—security. Organization is one of the keystones, and service is the other.

L. U. 113 had its yuletide gathering in our hall on the 15th inst. Brothers, wives, kiddies and mothers were present, and Santa came from the frozen north and, of course, he did not bring his treasurer's book with him, but the weather was ideal and sleighing was in order and the kiddies had eyes like saucers as he came in with bells to bring them his cheer, and he handed out "some"

presents from pop guns for the big kids, to household articles. Some of us got inexpensive articles of everyday use and, of course, saved us the trouble of calling up the grocer for them. But oh, the spirit; it passes understanding to see men, women and the children once—how they should be always.

The ladies committee of the auxiliary put up a fine display and thanks to them from the hearts of the entire membership.

We will have our annual election soon and I dare say without declaring myself a prophet, there will be little change if any in the major offices in our local union, as they can't be beat, and I hope they remain to stabilize the local for another year.

We have had quite a few initiations of late—linemen. Our city force will soon be with us, and then we can go to our City Light Department and secure for these boys a few more shillings for their pay envelope. Strength and purpose combined produce results when rightly presented.

We get out of life precisely what we put into it, and our attitude is responsible for much of our visions concerning it. To see with precision we must be schooled in thought and this comes about by education. We see our Editor has this in mind, and if we fail to put in our spare moments in study, and to round out a well balanced life, he has determined to place the subject matter before us which will give us a chance to see what others have given to enlighten men, and so help to awaken in our minds a better and more comprehensive view of things in general. So all hail to G. M. and to his noble purpose, and let us grow into men, thinking men, active co-workers for the greatest industry affiliated with the A. F. of L.

Success to all the Brothers and officers for the year 1927.

W. A. LOBBEY.

#### L. U. NO. 139, ELMIRA, N. Y.

Editor:

I have just finished reading the JOURNAL of December and it is fine. Thinking over the writings of the scribes, I must say I agree with the majority. I really do think we should pay more attention to publicity. I have also read three or four articles in our Sunday "Blat" against increase in pay and forty-hour week. It seems very strange to me that they should publish such articles (at this time) unless it is for the benefit of the other side. Nearly all crafts in this city are going after more money this April. Our agreements are to be presented January 1. The electricians and plumbers are asking for Saturday morning off during June, July and August. I would be willing to bet that our daily papers here carry an article against these parts in our agreements at least once a week until it is settled.

I ask you, Brothers, "Is that advertising?" You just bet it is.

Nine people out of ten think that a labor union is an awful thing. Why is it? I believe it is because they are not familiar with us as a union. They do not realize that if it were not for the labor unions they would not have the eight-hour day, state compensation, public schools and other conditions that I don't know about myself.

It is a known fact that in a locality where organized labor has a foothold, the unorganized profit by it to a large extent. In other words, boys, we have got to advertise ourselves; no one else will do it.

If this gets by our excellent Editor, you may be sorry.

J. E. PRICE.

#### L. U. NO. 140, SCHENECTADY, N. Y.

Editor:

On Thursday evening, November 18, Local No. 140, of the I. B. E. W., staged what was universally declared to be the best party and the biggest blowout in the history of the organization. The meeting was called the "twenty-fifth anniversary turkey dinner" and about 200 members with their wives and families sat down to the festive board at 8 o'clock, were entertained, and instructed by speakers of international reputation, and the dancing did not end until midnight.

Mr. M. J. Fanning, reelected vice president of the New York State Federation of Labor at the last convention, president of the Labor Temple Association, president of Local No. 140 and member of the legislative committee of the Schenectady Trades Assembly, was the presiding officer.

Mr. J. M. O'Hanlon, secretary and treasurer of the New York State Federation of Labor, gave a brief talk on the improvements in the laws of the state of New York with respect to labor and social conditions, since Local No. 140 was organized in June, 1901.

Mr. Charles B. Keaveney, International Representative of the International Brotherhood of Electrical Workers, spoke of general matters of organization and complimented Local No. 140 for the wage scale now prevailing in Schenectady.

Mr. James P. Boyle, attorney for organized labor in and around Schenectady, spoke chiefly on matters of compensation.

C. M. Ripley, of the publicity department of the General Electric Company, gave an illustrated stereopticon talk describing his airplane trip over Europe and how he flew two hours over the Alps at 95 miles per hour at the regular price of \$11 for the complete trip. He also flew three times between Berlin and London and totaled 2,500 miles of air travel on the other side. He then showed a series of pictures which he took in Europe illustrating the backwardness of European transportation methods and equipment, the small output per British miner, and the small output per worker in British industrial plants compared with the corresponding American industrial plants which use three times as much power. He quoted Samuel Gompers to the effect that "wherever you see high wages, there you see power and machinery, and wherever you see no power and machinery, there you see low wages."

He said the bigger the horsepower in any factory or industry, the higher the wages that can be paid—that high wages depend upon big horsepower. America uses as much electricity as all the rest of the world combined. We use so much because it is cheap. Electricity is cheap because it is made by big, efficient machines. Big, efficient machines are available because there are companies in Schenectady and elsewhere that have the skilled labor to build the machines, the engineering and scientific men who can design these machines, the equipment for constructing them and the sales and advertising departments to speed their adoption by industries.

He believes that electricity has made possible America's high standard of living and believes that if more and more electricity is used, that the standard of living of the American people will be increased, as well as the standard of dignity of American labor. As he put it, the man with the motor leads a fuller life than the man who slings a sledge or wields a pick; that the hoisting engineer is a better citizen than the hod carrier; that the man with the

tractor can do more, earn more and learn more than the man with the hoe.

He showed two slides on the screen which were taken from the ELECTRICAL WORKERS JOURNAL—the statue of the man with the hoe, and selections from the poem which was written about the man with the hoe by Edwin Markham, and others showing labor's long struggle for comfort, leisure and education.

The orchestra was led by Mr. Leo Kliwen, director of the WGY Orchestra, whose name and talent are familiar to millions of radio listeners.

WILLIAM VAN VECHTEN.

#### L. U. NO. 143, HARRISBURG, PA.

Editor:

With this issue of the WORKER another year has rolled around and we say goodbye to 1926 and look forward to 1927 and what it may have in store. To us of Local 143, I cannot say that the past year was kind and any change for the better in 1927 will be gladly welcomed.

At one time during the past year we had practically every man signed up in the largest non-union shop in town and if work had been plentiful no doubt we could have either signed up the shop or put them out of the contracting business as we did once before. However, someone started the report that we only wanted the men in the local so that we could call them out and then go and take their jobs.

No doubt the fear of losing one's job is the chief reason why this country is not 100 per cent organized and the hardest thing to make a non-union man see is that he does not own a job. A job of any kind is the most uncertain possession anyone has. Every day jobs are abolished and jobs are created, thereby changing the ratio of employed. Regardless of whether it is an organized shop or not, if there is a shortage of work one or more hands get laid off and numerous other natural causes beyond the control of the employer or employee are every day changing the number of jobs in this country. Therefore up to a certain point no man or group of men organized or not can say they own or control their job.

However, the great difference between an organized job and one that is unorganized is in the control of the job while it exists by the one holding it. Where an organized condition exists the job-holder absolutely controls the job, and through that power of control everything now enjoyed, such as the eight-hour day, punitive overtime rates, improved working conditions and the 40 or 44-hour week, has been attained and through no other means.

If the control of the job was taken away from every job-holder in the country in less than a week we would have the greatest panic the world ever saw and it would take longer to recover from the effects of it than from any war in history. Therefore, in correcting the mistakes made in 1926, may we all build in 1927 by co-operation, education and then organization.

CLARK.

#### LOCAL SECRETARIES

Here's a prize that will add interest and inject enthusiasm into your next organization campaign—every Brother wants one. A handsome finger ring in 14-karat green and white gold, with the L. B. E. W. "Lightning fist"—priced **\$10**



#### THE SPIRIT OF A UNION MAN IS TO GIVE THE KID A CHANCE

A helper is as you all know  
As a rule, a lightning rod for  
some.

If anything goes wrong on the job,  
The kid is sure to get the blame.  
Even if he isn't near the place  
He gets it just the same.  
If a bit is dull, the saw won't cut,  
The hack-saw is out of frame,  
The kid gets the blame for every-  
thing;

Sometimes it is a shame.  
Some Brothers never think of the  
time

When they were sent for an am-  
pere sift;

Now don't forget that you were  
once a kid

And give the kid a lift.

If someone blows a fuse,

The kid is surely blamed.

And the journeyman calls the kid

All kinds of names.

He forgets the fuses he has al-  
ready blown

They still make new ones, as you  
all know,

Let them blow, it is no crime.

Give the kid a chance, he will be  
a journeyman in time.

How many a kid has dropped out  
of line,

And what is the offense?

He would like to be a union man  
But never got a chance.

The kid will be a man some day

Let's hope he'll never forget

That he was made a union man,

He'll never be a scab.

BROTHER AUGUST F. SCHLOSSER,  
Local No. 488, Bridgeport, Conn.

lar? Or can it be that the principle of unionism (though some of the Brothers in mind have been faithful workers and true to the colors) has become so much a matter of form that they do not see it their duty to still be a member of the local union and help support it? The cause must be one of the three, as there surely is a reason when there is a slack time and a Brother takes up another line of work at less money per day, and if they stay with the job a few months they forget to come to meetings and lose interest in the local, and it is only a matter of a short time until they drop out, generally having developed a sore spot of their own doings and ripening with time until it becomes a running sore, as they seem to have an inner hunch they were foolish to have let their card drop; and have also found it's hard to leave the tools alone when they have used them for years. Thus is born another curbstoner. Some of the Brothers who have taken a withdrawal card, due to their promotion or misunderstanding, have forgotten to keep up their per capita after a few months as rubbing elbows with a different environment has gone to their heads. This is no dream, as these conditions exist in this locality, and with few exceptions with all who have been drawn to the slightest extent from the regular routine as an inside man or outside man.

We are having a change in the city electrical inspector in Rock Island, as W. McNeally, who has held this position for the past six years, is resigning January 1 to join the contracting staff of the Electrical Construction Machine Company and Brother M. G. Welsh was appointed to fill the vacancy. No such luck as getting a Brother in as inspector in Moline, as inspection conditions are practically no better there than in the past.

This will be all for this spell; and speaking for Local No. 145 as a whole we wish Brother Broach success and luck in his big battle in the east.

E. L. SMITH.

#### L. U. NO. 145, TRI CITIES—MOLINE, ROCK ISLAND, ILL., AND DAVENPORT, IOWA

Editor:

This finds some of the Brothers not working and a few under the weather. Brother Conard Bear slipped on an icy sidewalk and broke some of the bones in his foot and is laid up at his home on the banks of Rock River; Brother Bob Brooks, of Local No. 109, is back on the job, having been off for some time. Had a bad fall some time ago when he fell off a pole as his spurs struck a lamp support as he was descending a pole and he broke some of the bones in his elbow. This Brother sure has had lots of bad luck. Earl Altz, an ex-member and who has been running a battery repair shop for several years, got tired of life and shot himself. Bert Rickard, the old line foremen for the Peoples Power Company, has left these parts to take a similar position in Florida.

Brothers, have you ever noticed, that when a slack time hits your locality that some of the Brothers start some form of agitation that may be for the betterment of the local or otherwise; and it generally starts some of the old heads to taking stock of the membership and checking up on the Brothers that may have taken up another vocation, and they get to asking themselves the question, "What can it be?" Is it a case of finances? It is true the dues amount to a few dollars if the local union amounts to anything. Or is it a case of pride, as the party or parties in question may have changed from the denim to the white col-

#### L. U. NO. 163, WILKES-BARRE, PA.

Editor:

Local Union No. 163 is going over the top for 1927. How is that for a statement, boys? The Building Trades Council of Wilkes-Barre and vicinity have started the movement for a closed shop town and valley and our local starts out the first of the year with a Building Trades Council card with a payment of three months in advance. This will save the slack members who go three months in arrears and lose their insurance and local standing, also their five years' card in the International. We had one of the best constructive meetings this evening that we have had in a long time. It reminds me of the old linemen days back around 1900 to 1905 and 1915. It proves that we humans crave for something new to keep up the interest and we feel sure that the electrical workers here will show that they are what their trade represents (educated lighting) in the labor movement wherever there is a local union. And we believe from the WORKER I have just received, that the electrical workers of the state of Pennsylvania will spread all over the state the slogan that the electrical workers are educated lighting in the labor movement of this state. It can be done with the cooperation of every local now functioning and will help to enlarge the present locals and help to bring new locals to swell the state organization. We know that any worth-while benefits are the ones that seem the hardest to accomplish. Those are the

ones that give the most satisfaction when we see the result of consistent effort.

I want to thank locals of Harrisburg, Easton, Erie, and any other local that has taken up the state organization question for consideration, and I would like to have as many locals of the state tell in the next WORKER that they are interested and that they will arrange with the president of Harrisburg local to furnish one delegate to go to Harrisburg at a time stated later, as Harrisburg is the center point of the state, and the headquarters of the state federation, and Brother Kelley, of the state federation, is only too glad to render all assistance to aid in the efficiency of the electrical workers of the state and other trades, but we all know that no one can help you as an individual or organization if you as an individual or organization won't help yourself. There is no power on earth can help you. Such is the condition of the electrical workers in this state at the present time. So let's wake up and do something along this line for 1927. I may say something to make you mad, to make you think, but I don't think it necessary.

Our Central Labor Union had tag week for the Willamantic, Conn., and Passaic, N.J. textile strikers and the committee is continued to assist in the presentation of the moving picture that the textile strikers will show all over the country in the near future, and two of our members are on this committee.

Conditions here around the holidays have been very quiet in most of the trades, but our business agent has kept our members distributed through the valley and no craft has had as many of their members employed according to the percentage of their membership as our business agent has done for our boys.

Again I want to commend our Editor for the fine WORKER he is giving us and if we could only get the whole membership to read it from cover to cover, in a short time we would have the best-informed organization in the A. F. of L.

I would ask you to read over the article in "Labor News" of Wilkes-Barre and vicinity, Brother Editor, of the debates of James H. Maurer on "The Open Shop vs. Closed Shop," and I would ask you to take the meat of it for the benefit of our members and either print it in my letter or as a separate article.

I will close for this time with the hope that the electrical workers of the state will, through their local unions, have a state organization before we advance far into 1927.

W. F. BARBER.

#### L. U. NO. 177, JACKSONVILLE, FLA.

Editor:

The year just closing has been a very successful one from the point of one who has had an opportunity to view it from our side of the world and while we have not been able to accomplish all that could be desired in the way of improved conditions, yet we have much to be proud of and are going to strive to better the condition of our members in the year that lies before us.

We have experienced one of the best years in the history of the local since the world war and while our growth has not been phenomenal we have increased our membership better than 100 per cent and conditions have also been considerably improved.

So let us resolve that during the year that is ahead of us, to hold what we have gained and strive to make it bigger and better and not be satisfied with anything less than a 100 per cent organization at the end

of another period. It can be done! Let us forget whatever little differences may have existed during the past and by the whole hearted support of every member strive to make the next year the banner year for electrical workers.

We have just elected our officers, who are to carry out your dictates during the term beginning January 1 and I believe that they will do their best to carry out the program that we have before us. Remember however that it is not the officers of the local that make the organization, but the membership at large, who by their efforts are the power that wins in the end. Without the staunch support of the members, no organization can hope to succeed in any undertaking. Your officers are elected to carry out your wishes and they need your assistance. Don't imagine for a moment that your duty ends when you have met your financial obligation, nor when you have attended the allotted number of meetings each month. You should not only do these things, but be there to offer your services unselfishly every time the occasion demands.

A local may have the best officers obtainable, but if the membership is eternally divided on every question submitted for consideration, they can never hope for success however hard the officers may work to bring it about. Every time I see the membership divided on a question that is vital to their welfare, I am reminded of a cartoon that I saw one time of two jackasses. They were tied together with a rope around their necks and at one end of their corral was a pile of choice hay, at the other end a box of oats. Being asses they naturally were a bit stubborn and one wanted to eat the oats while the other one decided he wanted hay. But the rope was too short for both their desires to be satisfied at one time, so they stood in the middle of the corral, one pulling one way and the other in the opposite direction, neither of them being able to reach that which he most desired, until finally they Put Their Heads Together, in other words they organized. Then they went together to the end where the oats were and ate them, when that was finished they both turned to the other end and devoured the hay with equal relish and both were satisfied. The moral that is conveyed by this picture is, get together, organize! Have at least as much sense as a jackass.

This will no doubt be taken by some as a joke and perhaps you think that I am trying to be funny, but I was never more serious in my life and I have seen just such two legged jackasses many times and the result is always the same. If you pull first one way then another you remain just where you were when you started. You get nowhere. But put your heads together and pull together and every obstacle can be overcome with the greatest ease. Try it sometime. You will be surprised at what happens.

Wishing every member of the Brotherhood many more Happy and Prosperous New Years, I will now sign off, until next year.

VAL.

#### L. U. NO. 184, GALESBURG, ILL.

Editor:

A few lines for the JOURNAL from L. U. 184 providing I am not too late for January issue. Last meeting we had nomination of officers and as there is a contest for two or three offices will send in the lucky ones for February JOURNAL. At this time Local 184 is doing fairly well. We take in a new

member now and then and most of the boys are working at present, one or two part time, which is not so bad for this time of the year. As we have had plenty winter so far around here which has tied up some building which means idle building craftsmen.

I see Local No. 51, Peoria, with Brother Holly pushing the pen has started a very good thing, a review you might say of their membership and I will say Shorty's face looks pretty good. Did not know you were so good looking Shorty. You seem to improve with age like some of the brands Tom Powers used to serve in the good old days of long ago. How about it "Happy" Frasher? Wherever you are this idea of Brother Holly's would be a good thing for every local. We would get better acquainted with one another. Brother Chris Smothers dropped in to pay us a visit just before Christmas, looking well and prosperous as ever. Good luck, Chris. Come again. Bill Read was with us for awhile but has left for parts unknown to the writer. I hope that all officers and members of the Brotherhood had a Merry Christmas and Happy New Year and I sincerely hope that the year 1927 will be a happy and prosperous year for each and every member of the I. B. E. W. and their families.

A. W. MAZE.

#### L. U. NOS. 210 AND 211, ATLANTIC CITY, N. J.

Editor:

Who says there ain't no Santy Claus? Migolly, when I rolled outta the hay this a. m. and heard the dining room table groaning under the weight of those prettily wrapped presents, I just naturally thought of the old poem that starts out something like this:

"Backward, turn backward, O time in thy flight,  
And make me a child again, just for tonight."

The spirit of Christmas sure flattens the old B. R. but the pleasure derived from it more than compensates one for the time and money spent in making others happy. Verily this would be a heluva world if everyone was a Scrooge. Why you can even be thankful to the guy who slips you an absolutely worthless, nonsensical gift. Yeah, just save it to pass on to some other poor unsuspecting sap next year.

After all is said and done and the debris is cleared away, that once popular ditty comes to mind: I think it was in fashion about twenty years ago and the once great colored comedian, Bert Williams, sang it:

"Broke, Broke absolutely Broke,  
It may sound funny but it is no joke,  
When a man's hungry, nothing left to soak  
B-R-O-K-E spells broke."

However there is one thing missing now at Christmas time, one thing that went the voyage when Mr. Volstead slipped it over on the masses and that is, the old time saloon keeper who used to dish out Christmas cheer to his steady patrons. Gee, I remember one year I collected 19 half-pints, 7 wallets, 8 calendars and a peach of a headache and still had nine more collections to make the following day.

As we ate Christmas dinner I thought of Horne of Los and the big bird he had raised from a wee bit of a pup and wondered if it was as tasty as he anticipated. You know I just couldn't do a trick like that, make a nice pet of anything, only to eat it in the end.

Nope, I'm afraid that when it came time to sit down to the big feed, the tears would

come and with them the thought, "Alas! poor Yorick, I knew him well."

Holly, old boy, you certainly made me homesick with your dandy letter; and that picture of "Shorty" Matlin took me back through the years to those days when I used to think "Migosh if I were just like those guys." Meaning him, Bob Marlatt, "Tiff" Henry and that old bunch of reg'lar bimbos.

You know how it is with kids, I betcha. Some of them want to be a cop or a fireman, a Ty Cobb or work in a candy store or behind the ice cream counter where they can get chocklit sodys.

But the heighth of my ambition was to be a lineman so I could wear the harness and hooks, smoke cigarettes and cuss-like a trooper. Ask Shorty, he knows.

Speaking of kids and Ty Cobb just reminds me that Judge (?) Landis should be run out of baseball. Why should that notoriety-seeking old fossil blacken the reputations of two characters like Cobb and Speaker? Both of them have been idolized by the kids for years and I doubt if there is one in a million who believe that they are guilty of the charges that the dirty old skunk made public. Why wait seven full years?

Tommie Dealey, you're getting worse every month with your old pessimism. Why don't you give yourself up and go out and accumulate a wonderful old fashioned snootfull: then sit down and look out at the world through rose-colored glasses? I'll betcha you would be able to write us a letter that would be a pippin and would quicken the pulses of a wooden Indian. You know damn well that you cannot get out of life any more cheer or happiness than you put into it. Quien sabe?

The king is dead, long live the king! Meaning that after a successful and at times turbulent reign of four years as recording secretary and B. A. my old friend Jack Bennett was sent to the "Minors."

Believing that a change of pastures was good for the calves, the boys elected Walter E. Cameron to that office. Walt is an old timer around these diggins and has done much towards making 211 one of the best locals in the east.

Personally, I was sorry to see Brother Jawn take the count but this much must be said, "He took it standing up and with a smile," and that's what counts with a true sport. I say, damn these belly achers who squawk when licked. However since it was in the Book, there is no one else better fitted to keep the good work going on than me old friend Walt. Best of luck, old top, and more power to yuh. As you all know, peaches may come and prunes may go but Cameron stays with us forever.

And now I am going to help pack the go-away-bags as the Boss and I are leaving early tomorrow morning on a ten days vacation trip—the first real one in over four years. Oh boy, ain't it a grand and glorious feeling?

Effervescently yours,  
BACHIE.

L. U. NO. 212, CINCINNATI, OHIO

Editor:

Some 600 of the human family came out Saturday night, December 18, to do their bit toward making our 25th anniversary a success. They came in many varieties—fat, lean, short, tall, pretty, homely, veteran sports and young ones all out to be devilish for a night at least. Having arrived somewhat earlier than I had anticipated allowed me to mix quite a bit previous to the supper call which was scheduled for 7.30. So I

## FORD'S FIVE DAY WEEK A QUERY AND AN ANSWER

Henry Ford has started a five-day week in his factory. This has been, and is, the object of all labor organizations. Ford has made the first move. So it is our duty to induce other employers to do the same. It is not wise for us to criticise such an achievement, for such criticism will only mar our endeavors toward the goal. Our Editor says Ford is not humanitarian. This is not true. I know that he has the workers' interest at heart. In fact, he overdoes it. He has got an educational department that looks into each man's private affairs, such as visiting his home and sees that he saves his money. Most men resent this, but he thinks it is best for the worker. He means good and there is not one can say he is not human. Another thing, they are allowed to invest their money with the company, which pays always around 14 per cent. Our Editor quotes Gary and Edgerton as referring to the Scriptures to prove the five-day week a pernicious measure. If they would stick to the Scriptures in all their operations, those mills would be a paradise to work in. Then again, our Editor goes on to say that Ford's action should not cause rejoicing among our labor leaders. Let us drop this jealous spirit, and don't hold back progress. Ford has given us a start. Just what we needed. So let us take advantage of such an opportunity and fight the fight.

JOHN McMILLAN,  
1205 Fayette Street, N. S.  
Pittsburgh, Pa.

I. B. E. W.  
Local No. 5.

**Editor's Note:** The short work day and the short work week have been a part of the organized philosophy and the practical politics of American labor for a generation. The five-day week as it arrives is but the natural result of organized labor's agitation and evidence of organized labor's insight into economic evolution. In our remarks on Henry Ford's five-day week we were intent, therefore, on doing two things: first to point out that the five-day week was not the invention of the sage of Dearborn; and second, that the five-day week as put into practice by Ford was not organized labor's five-day week, for Ford, as he said himself, expected to crowd six days' work into five.

Organized labor is intent on protecting the human element in industry, and can not condone Henry Ford's proposal to increase the wear and tear upon the worker, rather than upon the machine.

decided to make notes about people rather than banquets for a while at least.

The ladies, as one could well expect, were naturally more attractive than the men. I don't remember of ever having seen a gathering of more beautiful women folks than was with us that night. I say that with one exception, I do recall recently when I stood in front of a prominent department store show window, viewing with admiration the enlarged photo of the last Atlantic City bathing beauty contestants, but as they were presented in entirely different costumes than the ones were which I was now having the pleasure to meet, I think it would hardly be fair to make comparisons.

I noted some as they entered the lobby. Fur coats which set a fellow back for many a penny arrived, with proud wire patchers beside them.

Jewelry of all kinds decorating dainty necks, wrists and fingers.

Evening gowns now replaced the kitchen bungalow apron and how well they wore them!

Rouge, powder and lip stick worked overtime, but in some cases to quite a good advantage.

I was stopped by Jack Raymond, who presented his wife and grown daughter. I met them a few times afterward but it was puzzling to keep in mind which one was the daughter.

Kentucky must have been well represented. I noted several of the stronger sex checking their wide-brimmed hats. If guns were toted they kept them on their persons.

I had the pleasure and advantage to meet the house detective, which brought me back to the sudden realization that we were in the Aims Hotel, and also that our small party upon arrival had registered in No. 521, and also that the black traveling bag had

been snugly concealed in a closet corner. Yes, I figured that it would be well to remain friendly with the house detective.

Tony Sonnybrook has a great way of greeting you. He slips up behind you as though he were about to use a blackjack. You know I wrote recently concerning the wonderful garden party put on by Tony this past summer. It certainly is a shame that the old boy ever became interested in the bricklaying trade. I really believe he would have made a great wireman, especially on occasions of this kind. Yes, Tony was present with son Art, who was brought up in No. 212. One of the most pleasant bits of news, to me, was when Tony threatened me with another party, said he could feel it coming on. I immediately made reservations.

More agreeable surprises—met Burek and Berndt, of No. 481, Indianapolis, who said they had driven over 100 miles to help old No. 212 celebrate, had picked it up over radio the week previous. Later on I met Keen, also of Indianapolis, and Kelley, of Cleveland. All apparently had been escorted between acts to our private room No. 521.

The committee in high stages of confusion disclosed the fact that a wire had just been received from our International President, Brother Noonan, expressing his regrets, but on account of very urgent executive board business he would be unable to attend. This was sure a disagreeable surprise as Brother Noonan had accepted our early invitation, stating he would use every possible effort to be with us and we had planned on his presence being the outstanding feature of the evening.

It appeared at just this time that everything was failing to work out properly. Everybody was seated at the banquet table when the committee received word from Committeeman Thomas Loaring, Sr., that it

would be impossible for him to get there, and it had been assigned to Tom to do the honors, by opening the affair with sacred ceremony. I must have been the first one Chairman Fitzpatrick encountered after he received the word. I know he was still confused and bewildered for he actually requested me to act and act quickly in Tom's place. I looked over the crowd that had already experienced about an hour's delay, while details were being adjusted, and hurriedly decided that if I possibly could do anything that would help bring food to hungry wire twisters, their families and friends, I would certainly use effort to do so. Amazing as it may have seemed to all I put it over.

The band played "America"; the waiters really became active, and Lord how that food did disappear.

Brother Voelmecke, as toastmaster introduced several members who gave us quite interesting talks. Included in these was our present president, Fitzpatrick, and Business Agent Cullen.

Brother George Rost was introduced as our first elected president and one of the few remaining charter members of No. 212. To see George ducking through city alleys or over our suburban districts with his famous cement sack during his hours of labor would never bring to your mind the possibility of his being an after-dinner speaker. But just let George slick up his hair and get into his soup and fish and he certainly is equal to the occasion. He referred in detail to the early struggle the older members had in years back which eventually brought about the good conditions which we are experiencing today, and George has every reason to know, having been in the employ of one firm, the Becker Electric Company, for 47 years. Following his interesting remarks he was presented with a beautiful watch and chain by Brother Cullen, also a charter member. This was a surprise to many others than George, as it was not presented by the local, but by his oldest friends of the organization.

The dining hall was quickly transformed into a massive ballroom where everyone seemed to become youthful again. I saw some fellows who put forth every effort to mount a six-foot step-ladder, gracefully cantering through shadow dances.

At 2 a. m. the Missus and I were taxied home by Brother R. Cullen, who furnishes service at cost, all pledging ourselves to be present when the next 25 years was celebrated.

Having told about the people and the banquet, I now want to note a few words of appreciation and thanks to the boys on the job, also Mrs. Charles Foster for the lovely rocker presented yours truly, which I know was accompanied with, way down in the heart, best wishes for a Merry Christmas. I admit I am reaching the time when a good comfortable chair is appreciated and it certainly will be a pleasure for me to use it. Thanking you again and hoping that we may all join in a Happy New Year.

THE COPYIST.

#### L. U. NO. 223, BROCKTON, MASS.

Editor:

Once again Local No. 223 breaks into print, and I must confess it begins to look like an annual event.

The union has taken new rooms at 26 Center St., which have been painted and decorated in first class condition, and from what the boys say, it is 100 per cent better than the old place in the Washburn Building, where the local has had rooms for about 20 years or more.

On Wednesday night, December 29, the first meeting was held in the new quarters, and it was a dandy, a large crowd being

present. It was also election of officers. After opening exercises were dispensed with, one helper was initiated, routine business disposed of, and then the big event of the year, the annual election of officers. After the ballots had been counted, the following Brothers were elected to office: President, Herbert Ferris, third term; vice president, George Bolling; recording secretary, Mathew J. Brennan, seventh term; treasurer, James Flynn, third term; financial secretary, Arthur Spencer, 18th term; first inspector, Melville Thayer; second inspector, Ernest Linehan; foreman, Horace M. Creamer, fifth term; trustee for three years, Ernest Bridgwood; executive board, Ferris Flynn, Spencer, Brennan, Chase, Bolling, Linehan, Holton; examining board, Chase, Flynn, Ferris, Brennan, Joy.

The above list of names represent the cream of the local, by that I mean the boys who are willing to do their best, and carry on for the coming year, and I trust they will, because they have attended meetings faithfully and some have held office for many years before. Arthur Spencer, for instance, he never fails us, in fact he should be working in a bank, for the boy is clever at keeping the boys paid up, especially on non-attendance fines.

The next in line is our recording secretary, "Matty," "we call him that when we are not mad at him," he is also a selectman in a nearby village, and great responsibility rests on his shoulders, but he handles it all right. If he could only write as well as he can talk, he wouldn't have to pull wire for a living. We can always depend on him to start something, he gets some of the Brothers a little peeved at times, but we know "Matty" is sincere, and is doing his best to help the union along, for he is on the square. Jimmie Flynn is a wise "old" owl, he doesn't say much, he lets the other fellow talk, while he listens, but when he does talk, you can depend on it he knows what he is talking about. Now last, but not least, among the officers, is our very good friend and president, "Happy" Ferris; without a doubt he is one of the most good hearted, best natured, sincere and dependable men we have ever had in the president's chair. He knows the business, and believe me, he needs to when "Matty" gets to work on him, in regards to parliamentary law, and you know when two great minds clash, something usually happens, but "Happy" never fails us. Between Ferris, Brennan, Spencer and Chase (the four horsemen) there is always something doing.

Brother Blair is a regular attendant, but doesn't care to hold office. We have tried to show this Brother the error of his ways, and I thought he would turn over a new leaf for 1927, and take an office, but he disappointed us, for he would be very valuable to the local as an officer, on account of his long experience in the affairs of the local, and his knowledge of the constitution and by-laws of this union.

Business in Brockton and vicinity is fair, the boys are all working and everything is going along as well as can be expected. We hope that the coming year will bring prosperity and happiness to the Brothers, and if "Happy" has anything to do with it, we will surely have it.

I hope the Brothers of Local No. 223, who read this article, will continue to come to meetings, and to urge those Brothers who don't, to come to the meetings more often, so as to create a stronger and better union, which will eventually benefit each and every Brother in the union.

Brothers, don't forget: "United we stand; divided we fall," and upon the first three words depend our prosperity and happiness.

Attend your meetings and show your pres-

ident and other officers that you are right behind them in their great work to make your union stronger and conditions better.

A Happy New Year to All.

HORACE M. CREAMER.

#### L. U. NO. 230, VICTORIA, B. C.

Editor:

Living in our little island home so peaceful and undisturbed we are apt to forget all about the busy outside world, if it were not for our energetic business agent, Brother Reid, going around pounding non-attending members of meetings on their ivories with a bladder full of beans to make them think there is a thunderstorm on, they would forget that Local 230 was in existence.

The B. C. Electric Co. have signed up a closed shop agreement for another year and all members are working. Conditions among the inside wiremen are not so good but Brother Reid, following the lead of Local 213, of Vancouver, who have been successful in signing up all the large shops at an increased wage, is endeavoring to remedy this state of affairs.

One thing which keeps Victoria on the map is the "spirit" of the place. All last summer down south of the line along the coast there seems to have been a very large number of people suffering from snake bites. Now this "spirit" of Victoria, besides being known as one of the best antidotes for snake bites, is also noted for its great success in cheering up the most pessimistic individuals who partake of it and transforming them into rosy-faced optimists. Strange to say Uncle Sam has made it illegal for any of this antidote to be imported into the U. S. thereby forcing poor sufferers to come all the way up here to save their lives.

You can see all classes of professional men, grave and dignified, looking as if they never smiled, who as soon as they land here, march straight up to the dispensary which our benevolent government, out of the goodness of its heart, has seen fit to establish, and after having imbibed a quantity of this famous beverage immediately become changed individuals. Gone is all their haughty reserve as they slap each other on the shoulders saying, "How are you, Bill, old boy?" and they will talk to passers by in a real human manner and their whole appearance seems to change.

From the long, lean Ancient Mariner type they had become stout and jolly with mysterious protuberances appearing on their persons. I think that one of the most sorrowful tragedies that ever happened took place last summer, when a whole boat load of sufferers landed here and secured a bountiful supply of gloom chasers to take back with them, but on boarding the boat to return some black-hearted individuals in the guise of U. S. Government officials, in spite of their wails of distress, forced them to throw the whole stock overboard. Their next visit will probably be in a submarine.

Thanks, Brother Andy, of Tacoma, for your kindly mention of my little burst into the realms of poetry. It is my first offence and is partly accounted for by the fact that I have temporary possession of the ancient and only typewriter which this local possesses.

SHAPPY.

#### THIS BUTTON IN YOUR LAPEL



proudly announces membership in the I. B. E. W. A hand-made bit of jewelry, in gold and enamel. Solid gold, medium size. \$1

**L. U. NO. 245, TOLEDO, OHIO**

Editor:

Greetings, electrical workers! The day and date will make the greetings a part of this writing, as you will no doubt notice that it is Christmas Day. But while this is one date and as this goes to press on a much later date (if at all) would not make the season's greetings at all appropriate. But the greetings of the local still stand. Toledo had a green Christmas this year and a very beautiful day, much to the liking of linemen on this particular holiday, as they all were at liberty to spend the day with their families and friends.

The year 1926 is soon to be history and in its wake will be memories of a prosperous year. Every one was busy and with the exception of one layoff in April, our men have had continuous employment.

No. 245 finished its nomination of officers last Tuesday night and had plenty of the old-time pep and interest as there was plenty of opposition for each and every office and as next meeting night will be election night it ought to bring out plenty of interesting events and it is a certainty that there will be several new names on the rollcall of officers for the new year. And it looks as if they are going to continue the same method as before in regard to a press agent. They haven't had any lately and as they are going to let me remain in that capacity then it is an established fact that they won't have any this year. As the brand of cigars that Hank Schromberg is passing out is of a far superior quality than any of the opponents the writer predicts that the president's chair will be occupied by Hank.

Our retiring president, Charles Neeb, declined the nomination for re-election on the ground that he has given the organization two successive terms of untiring efforts. And speaking for the entire local, No. 245 wishes to voice our endorsement of Brother Neeb's statement, for no matter how stormy the night or how small the attendance, he was always on the job with but one thought and that was to serve his local, his brother union man and the workers' cause. We accepted his declination only with the understanding that he would in return accept the nomination for some minor office. So, we will have Charley Neeb with us in a capacity where he can still serve us in his untiring way as a trustee. And here's hoping that his successor will retire from office with as good a record and with as many loyal friends as the man before him.

Local No. 245 wishes to report conditions progressing and every meeting night now means one or more initiations and they all mean one more friend to the cause. Our sick report this month contains the name of one Brother, William Hemminger, who spent his Christmas in bed with a broken foot received when he dropped an arc lamp bracket on his foot three weeks ago. I understand that the noon whistle blew when he was carrying the bracket to the truck and, of course, he dropped it on his foot. But to be serious, we have been unusually fortunate in accidents and sickness for the year 1926. It has been our fate to report one casualty, however, that of our Brother, Joseph Shields. And as press agent I hope that it will not become a duty of mine to send to the JOURNAL one single memoriam during the coming year.

Let the coming year bring with it nothing but prosperity for us all. But with the present rate that Toledo is growing and making new suburbs and divisions there will be plenty of work for us all in the

electric lighting field and as the city has had plenty of new signal lights to install and keep going the city employees have a bright outlook for the coming year. So with that I will do as the year 1926—come to a close.

EDWARD DUKESHIRE.

**L. U. NO. 261, NEW YORK CITY**

Editor:

I am grateful to you for finding a space for my December letter, and I am pleased also to convey to every local union in the I. B. E. W. the thanks of every member of Local Union No. 261 for the assistance they have rendered us during our strike, and I wish to state that the said strike is nearly ended, and with grand success and splendid results to L. U. No. 261.

After a fair fight of over four months we have succeeded in signing up almost 100 shops in New York City and vicinity. Particularly pleasing to No. 261 is the fact that we have the large uptown shops on that list, those that held out and were told to be shock troops, as some one was at their back. If you Brothers remember reading my letter in the October WORKER, I wrote that L. U. No. 261 were the "shock troops," and that we had the uptown manufacturers surrounded and they didn't have a chance to turn in any direction, and if they moved it was with the fountain pen in hand to sign on the dotted line. That is what they had to do—surrender. Even their great commander found out his orders from headquarters were all wrong, and that to try to advance any further in the face of the "shock troops" of No. 261, led by the experienced generalship of International Representative Meade and his assistant, yours truly, would be nothing short of suicide. Up went the white flag and a conference was arranged, and our fight is almost at an end. A few stragglers were waiting for the move of the uptown regiment. These few we expect to get to sign on the dotted line very soon.

This strike has been carried on for over four months. Some record in a local union and in the largest city in the world, and where it has been so broadly advertised by some manufacturers that they could make any man into an inside fitter in two weeks. From my visits to many shops I found that in the four months they have not found one-half dozen men to compare and compete as inside fitters. I found in a few shops where men were hired to take the places of strikers. These men were discharged. The shop was signed up, owing to their lack of ability as fitters and the loss of material they destroyed trying to become fitters. Therefore Local Union No. 261 has some victory to its credit, and particularly when you Brothers come to understand that this fight is no four months' fight. No; this fight has been going on for years trying to make the manufacturers recognize an inside fitters local union. It could not be done until the I. B. E. W. stepped in and allowed it a charter, in March, 1925. Up to the present the average wage was \$35 for 50 and 54 hours' work per week, and that miserable salary for the best mechanics. We have now secured 48 hours at \$1 per hour for journeymen, and 62½ cents per hour for helpers. The latter got a good stride when I found they were only receiving from \$18 to \$25 for 50 to 54 hours per week; and at times doing journeymen's work. From these rates you can see where the inside fitter's lot was a miserable one, and consider his ability and living conditions and how he could exist. Is it any wonder the men had no ambition to produce or help out any production manager?

Before I close I wish to say that Local

Union No. 261 members have been congratulated by the manufacturers for the good, clean strike they carried on, that the several pickets at their shops behaved in a gentlemanly manner.

I would like to get in touch with any state association of electrical workers, so that I could visit them and explain the working conditions of our local union, the same as I have done at the Massachusetts State Association held at Springfield, Mass.; the Connecticut State Association held at New Haven, Conn., and New Jersey State Association, held at Newark, N. J., where in these meetings I got a resolution through that is bearing great fruit. A copy of said resolutions can be furnished by this local union and a copy of all signed-up shops and non-signed-up shops will be gladly forwarded to any local union on demand.

M. J. BUTLER.

**L. U. NO. 271, WICHITA, KANS.**

Editor:

This is the last letter I will write for the WORKER this year, so I will wish you all a Happy New Year.

We have had a lot of social activities around here the past couple of months. Hutchinson local had an open meeting and entertainment and a bunch of us went over and were well paid for the trip. We not only met a good bunch of fellows but got to see a good show, had a big feed and heard some good talks by Brother Kern, vice president of the Kansas Federation; Brother Mum, of Great Bend, one of the oldest union men in this part of the country, and our own financial secretary, Brother Cupples (this guy's name is spelt with two pps, he got sore the last time I wrote about him because you spelt it with two ffs). Personally I enjoyed the evening very much and would like to see something like this pulled every now and then. Then the last of the month we had a big dance in connection with the garment workers, bricklayers, barbers, painters and street car men, which was well attended and everybody seemed to have a good time. Our president, Brother Dunham, was right around there at this event and I could mention some more that didn't act so old, but there is no use to get anybody in bad. Personally being a high line hand and out of town most of the time, I am kind of skirt shy, so I didn't mix in it very much only to get a few notes for this letter. I believe it is a fine thing for the different unions to do, it is bound to create a friendlier feeling and helps to get your mind off of the work. I know I bought a pair of J. and L. overalls the next day after I had seen some of the bunch that make them and they are darn good overalls, too.

Business around here isn't any too rushing at present, the K. G. & E. are pulling in their underground cable, but I guess it isn't electrical work, anyway I haven't seen anybody to speak of around it that looks much like an electrical worker. Most everybody is working; in fact, you pretty near have to, work out here or you are liable not to eat regularly. I have often wondered what in heck goes on in the towns that are always writing about business being on the bum and a big bunch of men loafing. How in thunder do they get by and if they are loafing and want to work, why don't they take a traveler and get out and get a job instead of hanging around and worrying the business agent and keeping some good traveling Brother from depositing his card? Of course we can't all boom around all the time, but a little trip now and then isn't so bad and it gives a man a chance to learn

some new kinks of the trade and also to spread some of the things he knows.

I was glad to see a letter from Bartlesville, No. 290, in last month's WORKER. That is where I got my card but I have never worked there since and I have oftentimes wondered if they were still alive. We used to have a real bunch there and we didn't care much whether the river came up or not, as things were fairly wet most of the time, anyway.

Well, I guess I will ring off. I am figuring on losing this job when we elect officers, as I understand there are several candidates out after it and I ain't going to put out no cigars nor buy any votes, and I have a notion to run for second inspector. That sounds like a good job. Press SEC'Y.

#### L. U. NO. 288, WATERLOO, IOWA

Editor:

It has been some time since Local No. 288 has been represented in the JOURNAL, but we are going to try again. There have been no big jobs here of late, but most of the inside men have had steady work, and the regular line gangs have been hitting the ball without the usual winter lay off. So you see we are getting along very nicely, although a part of the credit should be given to the mild winter we are having. Perhaps I had better not crow too soon for there is plenty of time for a real freeze up yet. Our regular bunch must have had a hunch for I do not know of any of them going south. We have also gained several new members this winter. A few letters usually come rolling in after we come across in the JOURNAL and we are sure glad for them.

We have had election of officers for the coming year and the following Brothers will serve for 1927: President, F. Hackley; vice president, C. Rodruck; financial secretary, W. H. Webb; recording secretary, H. P. Haffa; treasurer, J. J. Diggins.

H. P. HAFFA.

#### L. U. NO. 303, ST. CATHARINES, ONTARIO

Editor:

And so like all good things "Scaramouche" has come to an end. The author finished his story to suit the boxes and dress circle and the people in the gallery, like myself, are left a little disappointed. Why do so many writers, voters, thinkers and so many workers have that silly idea that "if" the masses, the workers, labor, or whatever you may call the advanced thought in politics, got into power we would have chaos? And that John Jack and May Mary will so forget their manners, if they ever had any, that they simply make a mess of everything? Silly is the word I use for want of a better word, but you know what a slim chance any worker will ever have of being the genuine choice of the workers. We know only too sadly that some first-class knaves have gone from the ranks of the workers and have double-crossed and criss-crossed and will do all the time they are allowed to. But, bless the thought, the workers are wise some of the time. Who was it that said: "You may fool all the people some of the time, some of the people all of the time, but you can't fool all of the people all of the time?" And for a lifetime I have believed that there would be a time when the men like Andre Louis (Scaramouche) and his friend, Philip Vilmarin, would be the chosen representatives of the people. You will see that they will come from all walks of life. Should none of our valued contributors finish the story as it in justice should be finished to that international circle of brotherhood who, in season and out, in high office, if they ever reach it, and in the ranks of toilers, are

not and could not be the common rabble that is so feared. What I would say, be sure you pick out an Andre Louis.

For 12 months we have more than enjoyed this story, Brother Editor, and here's shaking your hand for choosing "Scaramouche" for your first big story.

It grieves me to know that we have so few readers in this neck of the woods. They will not hear organization from our little crowd. Maybe it is just as well that such weak-kneed individuals stay out of the I. B. E. W. Those 100 per cent union men don't deserve to have such people wished on them. We are breezing along with the breeze, getting no new members and dropping those we have. In a few weeks we may quit holding a meeting even once a month, but we will have a handful of real union men, just our sitting room very comfortably full, and we will talk of things that might have been. Gradually we will wander away. It seems so very odd that our organization couldn't have held their emblem in this territory. I had thought of making the December letter the last one from No. 303. It seems hardly fair to occupy the space when we are so dead and thereby leading good union electrical workers to think that we have a wonderful local at St. Catharines. It misrepresents the darn place or I should say the electrical trade here. But somehow I can't say goodbye to our column after reading this issue and feeling so happy at the success of the Brotherhood in so many parts. It seems that some of those magnetic lines of force have called this loose wire back to the armature and so I'll continue the revolution for another month.

Wishing you all a very Happy, Healthy and Prosperous New Year.

THOS. W. DEALY.

#### L. U. NO. 333, PORTLAND, MAINE

Editor:

Hope you have a strong heart so you won't faint dead away with the surprise of hearing from this outfit from the Pine Tree State.

Have at last weakened under the constant hounding of our worthy president, Victor Erickson, and another of our members, namely, Brother Edward Burke, both of whom are anxious to see us put upon the map. While we are on the subject of Brother Burke I will take this opportunity of describing him for the benefit of you Brothers who have never had the pleasure of meeting him. A great fellow to argue. He will argue on any subject under the sun, from "Why do gentlemen prefer blonds?" to "Who won the war?" When he knows he's wrong, which he generally is, he'll argue just the same. He gets an awful kick out of it.

Working conditions are fairly good here. Although not burdened down with staggering wages, we have steady work and often get quite a lot of overtime. We have 80-odd members in our local and keep picking up one now and then.

The attendance at meetings last summer improved considerably, due a great deal to the efforts of our president and some of the other members. It still is not large enough to be called entirely satisfactory. We held an open meeting on September 17 and had some very interesting speakers, among whom were Brothers Charles Keaveney, John Fennell, John J. Smith and also Frank Fowles, from the Cumberland County Power and Light Company. We enjoyed their talks very much. John Fennell, who was a delegate to the Giant Power Conference at Brookwood, when asked to tell us about it, got a big laugh from the gang right off the bat by saying that he was

just crazy about Brookwood, as it was the only place that he had found in the whole United States that hadn't heard about prohibition.

We followed up the open meeting September 17 with a field day on Saturday and had a good time. Played baseball, poker and everything. Speaking about baseball reminds me that I must tell you that the Cumberland County Power and Light Company had three teams last summer. I won't tell you who won the pennant; we're still arguing about it. Anyway, we think we did. The others think differently.

Will sign off this time by hoping that your waste basket is full, so you won't have room to put this in, as it would break my heart if I didn't see this masterpiece in print.

RAY E. BONDWAY.

#### L. U. NO. 358, PERTH AMBOY, N. J.

Editor:

Time flies. Another month at hand and I have not finished reading last month's JOURNAL. Something tells me, "Try to get in a few lines for December." Some of our members either do not get the JOURNAL or if they get it do not read any of the contents, as it appears to me they do not notice that a letter is written for them to read, not having made any comments on my past writings.

There is very little change in the electrical line since my last letter excepting a few things that I will mention. Two or three card linemen on the new bridge work between Perth Amboy and Tottenville, N. Y., doing some work to furnish the power for concrete mixers, etc. I am told that some card men were in with the Public Service Gas and Electric, which sounds good. It will not be very long before this job will be O. K. A few more changes and card men stepping in. The Reade Theatre was being remodeled here and some of the boys got a piece of extra money out of overtime on it.

Business here is fair. I do not believe there are any out of work at present in our line. Building trades work is fair but not much of anything going on in the city.

Brother Andy Sheehey wants to know why the press agent of Local No. 551, Amsterdam, N. Y., does not have a letter in the JOURNAL. You are a small local, No. 551, but your secretary should be able to write big. Write once and surprise Andy.

Local No. 358 is still carrying on some busy meetings and taking in some new applications. The meetings are well attended by the regulars and well attended by some of the Brothers who forget how to use good English or United States language. Brothers, the meeting room is not the back room of a saloon or pool parlor. And as they say there are no more corner saloons, but there is a saloon around the corner. We all should remember that when a body of men meet they should be gentlemen. Cut out the indecent language and rough ways of expressing themselves or impressing their remarks on those in attendance. Another is co-operation with the officers, the members at the meeting, outside of the meeting and everywhere.

At our meeting on December 10, we nominated officers for the coming year. Our second meeting of the month will be on December 30 instead of December 24. A good attendance is expected.

We will soon begin to work on our new agreements so they are all prepared to submit to the contractors. We want good officers and committees to take care of matters starting out the first of the year.

WILLIAM H. McDONOUGH.

**L. U. NO. 367, EASTON, PA.**

L. U. No. 367 is still up and at 'em, we are still increasing our membership, a few each meeting, still have some on the outside and one or two shops in which we haven't any Brother working. We have the promise of the owner of one of the large shops that his men will be around in a body next meeting, armed with applications and initiation fees. Naturally we are confronted with the usual difficulties of getting the Brothers to put in an appearance at the meetings, but to say the least we manage to get a fairly good attendance at least once a month.

The difficulty of the linemen seems to be closer to a settlement than at any time since the boys walked out. Two of the executives of the local power company have been relieved and from what can be learned from the men now in power, they are very desirous of obtaining a quick settlement of the existing difficulties.

Barber, of L. U. No. 163, Wilkes-Barre, Pa., we, of Local No. 367, are behind any movement to further the interest of our craft, although we haven't been so very active for the past few years. We now have a good live crowd and all workers. We have gone into the matter of a state organization, the boys seem to be quite interested in the movement, and I feel that you can be assured of the backing of this local to the limit. Like yourself, I feel that this state of ours is large enough, great enough, and has sufficient electrical workers to support a state organization in which to further the interest of our craft.

Here is wishing a better, greater, and stronger year for the I. B. E. W. with a forty-hour week as one of the main issues.

H. E. M.

**L. U. NO. 369, LOUISVILLE, KY.**

Editor:

The old year is just about to sing its swan song and do a double flip into the past, leaving old Local Union No. 369 in just a fair condition as to the amount of work that the members are getting. A few are out of work at this time. Would advise anyone thinking of heading this way to get in touch with the business agent before coming in.

Election of officers of the local was held last night and a lively election it was, as there was plenty opposition for all the offices and the following officers were elected for the coming year: President, Jim Murray; vice president, Bill Blume; recording secretary, Edward Kleiderer; financial secretary, Ike Hudson; treasurer, J. Bickell; first inspector, L. T. King; second inspector, C. Bush; foreman, W. J. Horan; trustees, L. Voit, E. Ruppel, C. Bush; executive board, I. Hudson, E. Kleiderer, W. Ruh, C. Bush, and G. Becker; press secretary, L. C. Kaelin.

Former business agent of Local 369, Brother Sigmieir, who is now a member of Local Union No. 64, Youngstown, is spending the holidays among his old friends here, and also attended the local meeting and gave quite an interesting talk, especially along the lines of educating the helpers in Youngstown.

I have been instructed by the local to get a letter in the new and bigger JOURNAL each month for the coming year, and as this is near the end of the month, I will dead-end for this time. Wishing all the international officers and the members of the Brotherhood a prosperous New Year.

L. C. K.

The air mail route from New York to Salt Lake City is now lighted all the way by beacon lights which revolve six times a minute, flashing every 10 seconds.

**L. U. NO. 427, SPRINGFIELD, ILL.**

Editor:

Here is the result of our election held December 22: president, C. L. Schonning; vice president, Carl Meidel; recording secretary, R. E. Shean; financial secretary, William Murphrey; treasurer, Fred G. Volle; first inspector, J. A. Miller; second inspector, Walter Jordan; foreman, A. L. Todd; trustees, John Meidel and C. L. Schonning; international representative, C. L. Schonning; delegate, Russel Saul; alternate representative Illinois State Conference, William Murphrey; delegates to Federation of Labor, H. H. Weaver and J. C. Johnston; press secretary, H. H. Weaver; members of executive board, John Meidel, O. R. Evans, Al. Leek; business agent, H. H. Weaver.

We had a very good election, every office filled by willing members, the first time in the history of 427. With the continued co-operation of our membership we will grow to a better and bigger local. We have signed up two more contractors, thanks to efforts of Brothers Todd and Weaver. Local 427 has other things planned that will help make the boys glad that they have a ticket in the I. B. E. W. The result of this election has brought some new and younger blood into the official family of 427.

Brother C. W. Chiles dropped in and gave us some pointers that will help to clear up our conditions. We are always glad to receive information that will keep peace in our city. Sheik Bertges wears a swell ballot box, it holds a lot of votes. Many thanks, save it for next year.

H. H. WEAVER.

**L. U. NO. 455, MIAMI, FLA.**

Editor:

What everybody wants to know is how is Florida after the hurricane. Well, it's all O. K., about all of the repairs have been made and there is quite a lot of building going on but not as much as last year this time. Line work is getting back in low gear, laying off men right along so prospects at line work look slim unless things pick up after January 1. There was quite a bunch here to get some of the cream from the storm but there's no more cream so most of those fellows have blown out and are looking for more pickings elsewhere. Luck to them!

Whew! I tell you this is some warm weather, Old Sol is hovering around 85 right now and it's just right and fishing and bathing are better, so how do you think that sounds way up north in the snow-bound country? Mighty fine, boys, in the Land of Palms and Sunshine; just one door from Paradise, not many mosquitos; ask some of 84's members, they bunched the job cause the skeeters was too much for dem at Altos-Del-Mar. Well, boys, come back again, I am holding down the fort here and a few more of us but not many. Come to Miami Beach and play with us, you'll not regret it for the winter anyway. As I said work is not so good now and the outlook is not encouraging but probably we will have a change. The tourists are coming right along and will have a good crowd. After New Year's we have the Hi-Li and dog races are on now and the ponies start Xmas day at Pompano and the Hialeah track starts January 13 so we will have plenty of amusements this winter and the bathing is most ideal. It's some warm here now at Miami Beach, Florida, mid palms and sunshine. With best wishes to all the Brotherhood for a Merry, Merry Xmas and a most Prosperous New Year.

E. H. CHARLESWORTH.

**L. U. NO. 481, INDIANAPOLIS, IND.**

Editor:

A wise man once said, "There is a time for everything," and the time for me to write so as to have a letter in the January WORKER is now. If I do not, Oh! what a wall will go up from the side lines, "What is the matter with our press secretary?"

The one thing now uppermost in the minds of the members of our local is our new wage agreement. Our old one expires April 1. During the year just past, there was no change in our wages or conditions from the year previous. Due to a slight oversight in the working of our old agreement no increase was obtained. This year we are in hopes that will not occur again and we will receive a fair increase, placing us on a level with other building crafts in this locality. Whereas the electrical worker should be the highest paid, he is about the lowest. When it comes to having a trained mind and a technical knowledge of his work, there is no craft equal to, or requiring more training than ours. So why not a wage commensurate with these requirements? Our committee has been selected and already has drawn up a workable working agreement. Among the various changes we are asking for is a five-day week. Other local unions have this and it has been found workable. We are asking this year only what we feel is just and I believe every member is willing to go to the bat if necessary to obtain these conditions.

Perhaps some of the rank and file would like to know of working conditions here so will enlighten you. We have closed shop conditions, eight hour work day and Saturday half-holiday; double time for all overtime, holidays and Sundays; \$1.25 per hour, and they let you carry your own lunch if you so desire. Living is high and as usual we have a good sized loafing list. Our worthy business agent, Edward Berndt, was forced to buy a new car last week as he wore out the Chevrolet hunting jobs for the boys. My own desire is that he will soon have the town as tight as his new closed model. We read with interest the letters of the Grand Scribe from No. 58 of Detroit. Little did Local Union 481 know when Brother Peter Boland left our midst that we were losing so good a writer, though we did know him as a speech-maker well versed on the constitution. Well, here is luck to you. Brother Charles Lutz is back in the harness again after acting as assistant business agent in Miami. These cold days will make a lot of the boys wish they were back in the sunny south.

It seems that some of the scribes to the WORKER are having a hard time keeping within the 1,000 word limit, but here is one who does not. So with wishing the whole International Office a greater and more prosperous New Year, will sign off.

LOCAL UNION 481'S OFFICIAL BROADCASTER.

**L. U. NO. 492, MONTREAL, CANADA**

Editor:

Since my last letter to the JOURNAL, navigation on the St. Lawrence River has come to a close after a very successful season, which as usual throws a lot of men out of work until the river opens up again, but it is evident business is better around Montreal this year than it has been for some years.

The new bridge across the St. Lawrence from Montreal to the south shore is beginning to take material form and the Royal Bank of Canada's new head office, which will be the tallest building in this city (20 stories), will be rearing up on St. James street (the Wall street of Montreal) by the

time this is in print, as the foundation is practically completed.

The past month has been quiet in Local No. 492, with only one meeting this month and it so poorly attended that election of officers could not take place, having to postpone the elections until January, and I hope in my next letter to be able to report that we had a good meeting in January and the elections have taken place with all the members showing a keen interest in them. We accepted three new members in our local since my last letter from the Montreal Tramways Company, and we welcome them to our fold and are looking forward to the others coming in, who were waiting till the turn of the year. This is a time for new resolutions and I would ask the boys of this local to make up their minds to attend every meeting they possibly can and thereby assist in the work, take an active part in the discussions, bring forward any ideas they have to make proceedings more interesting and build up the organization in every possible way. I would also ask every member of the Brotherhood to set a good example to those laggards who haven't joined our order, show them we are proud of being union men and in the front ranks of the labor movement.

Let us also prove to our employers that they have no better employees than those who carry a union card, who give a full day's work for a full day's pay. In this the first month of 1927, it is time to think of those things, so that we can improve ourselves as the year goes on and when 1928 arrives have nothing to regret and a mighty lot to be proud of. In conclusion let us do our best to hasten the day that Robbie Burns was thinking of when he wrote:

"Then let us pray that come it may,  
As come it will for a' that,  
That sense and worth through a' the earth  
May bear the gree an' a' that.

"For a' that an' a' that,  
It's comin' yet for a' that,  
That man to man the world o'er  
Shall brothers be for a' that."

We have to go to "Holy Writ" to find expression or thought as beautiful and as practical as in the above two stanzas.

H. W. NEVISON.

#### L. U. NO. 494, MILWAUKEE, WIS.

Editor:

Our Thanksgiving evening hop will long be remembered as the most successful dance this local has enjoyed in several years. For the information of those who were not able to attend do not forget that this was a benefit dance for the fund created to take care of needy Brothers. Being on the reception committee sure was a pleasure. Everything went smooth until the windup. The business agent lost his overcoat in the excitement. Can you imagine our worthy chairman, Brother Manthy, walking down Third Street with an overcoat three sizes too small and not knowing the difference? He claims that he was sleepy at the time.

This being the last letter before election, I wish to call the members' attention to this memorable day on which to select your next scribe.

For the benefit of Brothers wishing to travel, will state that work is letting down at this time. The employment bureaus are complaining about an influx of labor due to false rumors regarding work in this vicinity. So please take heed and don't get stranded, as the weather is near the zero

mark. Oh, yes, came pretty near forgetting to tell you. We have a Rescue Mission in this town that for a little work, such as sawing a cord of wood, will give a night's lodging.

P. S.—Please do not forget to publish my last contribution, as I was put on the carpet, due to your oversight.

E. P. BROETLER.

#### L. U. NO. 617, SAN MATEO, CALIF.

Editor:

It has been some time since I have seen anything in the JOURNAL from Local No. 617 and as I was burdened with the press secretary's job last July at our election, I will send a few lines for a New Year's resolution.

Everything in San Mateo County is in fine shape. Every one is working and enjoying the best of conditions.

We had a pleasant visit from Brother Martin Durkin a couple of meeting nights ago. He gave us a very interesting talk on organization, and Local No. 617 feels that any local who has the service of Brother Durkin as an organizer is to be congratulated. He did splendid work with the boys of the P. G. & E. and could have got recognition for the steel mill electricians at the Pacific Coast Steel, but the electrical workers at the steel works were afraid they would get a pay reduction so they turned his efforts down.

The Impartial Wage Board allowed \$9 a day for No. 6 men. It looks as though labor is coming into its own again in San Francisco and vicinity, for which we are all thankful.

Well, I think this will be all for this time and hope this will get in the January JOURNAL.

W. L. BAKER.

#### L. U. NO. 683, COLUMBUS, OHIO

Editor:

Just recently Local No. 683 celebrated the second anniversary of the granting of its charter. The committee that arranged the entertainment should be complimented, for their good work. An old western bar was set up, even the foot rail was there. You could pick out the old timers by the way they edged up to the bar, and placed one foot on the rail.

Local No. 683 has had a very good year; all members have been working. Keith-Albee Palace Theater has just been completed.

The members have made New Year's resolutions to the effect that each one will do all in his power to make next year a bigger success. The thinking element of the electrical workers, realize that this is the day of organization; that in organization rests their salvation.

The most intelligent animals, birds and insects are gregarious. Why? To protect themselves from forces tending to destroy them. Take a hint from nature, organize, and thereby get that home of your own, automobile, education, and other good things that you should have.

GEORGE G. EBNER.

#### L. U. NO. 695, ST. JOSEPH, MO.

Editor:

This being the first letter from St. Joseph (the city Worth While) for a long time, I will try to give you some of the most important news.

The best news we have is that the Light Company employs all union linemen.

We have the same trouble here as all other locals—getting our members to attend the

meetings regularly, but just wait until our contract expires, then we will have to rent a bigger hall.

At present things look pretty good for this winter. We are now building a belt-line around town and preparing to cut-over to 6,900 V.

For the benefit of L. U. 53 I wish to state that we are taking mighty good care of Brother "Red" Adams and Brother "Bunk" Meyers, for they are good and faithful Brothers.

We have almost an entirely new set of officers for the coming year. They were elected as follows:

Charley Bibbs, president; Ray Eggers, vice president; H. G. Thomas, recording secretary; Frank Bias, financial secretary; Roy Waugh, treasurer; Art Gabhart, first inspector; Everett George, foreman; M. Parks and R. Eggers, executive board; Charles Bibbs, trustee.

This is a very promising set of officers; now watch 695 grow.

RAY EGGERS.

#### L. U. NO. 716, HOUSTON, TEXAS

Editor:

Work in Houston is not so rushing as it was last summer, and some of the members here have lost some time during the past month. Some have taken travelers rather than take chances; others prefer to wait for some new work which is expected to start soon. Traveling cards are being accepted as per rules and regulations, with the understanding that new members will remain on the loafing list until such time as work can be provided for them. Some do not choose this, and travel on. We try to be fair to everybody, and the fact that there is not enough work here at this time of the year for all who chance to come this way is regretted by this local as much as by the traveling member who would like to stay here. Traveling members as a rule are good union men, and we consider it our misfortune as well as theirs that the work is not here for all of them.

While reading the last number of the JOURNAL, especially the Correspondence Section, this writer could not help thinking of the wonderful improvement in the work of the press secretaries over that of a few years ago. Then, many of the letters opened with an apology, contained a few comments on matters of purely local interest, and ended with the hope that the contents would escape the Editor's waste basket. Whether these same writers have improved, or others have been selected with more ability I do not know; but it is very evident that the correspondence has improved, and to one who has been in favor of a stronger and better JOURNAL for so long these many years the evidence is very gratifying, indeed. Most of the letters now show a great deal of thought and care in their preparation, deal with subjects of interest to the Brotherhood at large as well as to their particular local union, and are deserving of study by every reader who is interested in ideas other than his own.

The Editor's advance notice that the 1927 JOURNAL is going to be even better than that of the past year is good news, and means that the press secretaries have a real job cut out for them to keep up with him. Every local union is entitled to and will receive space in the correspondence section if the letters are worthy of it and not too long, so why deny yourselves the privilege of representation and the right to be heard? Did you ever stop to think what the JOURNAL would be like if it contained a good letter from every local union every

month? If you don't want to do it for your own good you might at least throw a little overtime to the printer.

OTTO DEAN.

L. U. NO. 723, FORT WAYNE, IND.

Editor:

In going over our by-laws last meeting we found that the recording secretary is also the press secretary, so we had to "can" Harry Pickett, who was appointed by our president, Brother Guy Hall. Brother Pickett's intentions were good but he had writer's cramps or the ink got in his eyes, but from now on will try to have something each month.

Brother A. Steve Baker is back with the City Light and Power again after bummin' all over the country for the past three years in his Reo. Steve says his favorite song is "That Old Gang of Mine."

The cigars are on "Papa" Bogenschutz. The stork hovered over "Bogie's" house for some time, finally leaving a 10½-pound baby boy, who will make some lineman. Father and son are doing fine.

Brothers Merle Teeters and Jack Loraine took their annual vacation in the northern woods of Indiana, spending two weeks. They returned with loads of game and stories.

Brother Mansfield Lee Ward, of Louisiana, has been with us for the past several months. He is what we call "the educated lineman." We have learned more about psychology than we ever knew existed. He has some of the Brothers studying salesmanship, leadership and ancient history.

Brother Evan Wright, Henry Wright's baby brother, is learning to be a lineman. He is a willing kid and if he does as well as Hank he'll make some lineman.

Brother George Morrow is the same old wheel horse. The saying, "Let George do it" fits because George is right on the job when there is anything to do. Keep up the good work, George.

Brother Herb Bond is losing quite a bit of weight lately. I think he is on a diet or maybe walking don't agree with him. He is on "inventory."

Brother Cloyd Weikart is getting older right along. We celebrated his 30th birthday several times now in the last few years. He is the same old radio bug as ever. Brothers "Shorty" Bickel, Herb Romaine, Charlie Rupple and Walt Moser are still on the maintenance truck plugging along daily.

Old Jake Madden and Tom Fleming, of the City Light, and Lym Firestone, of the Indiana Service Corporation, are our old-timers, but they seldom miss a meeting. It always takes old-timers to keep the young blood from jumping over the traces. More power to you.

Brother William Lewis, of the Home Telephone and Telegraph, returned some time ago from a trip to the fatherland. Bill has been away from the bloody, bloomin' soil for six or seven years.

Jimmy McDonald is walking around with his chest out. Jimmy has a fine boy at his home. Norman "Dutch" Zimmerman is still in the chicken business. He is getting all set for a big business in the spring.

Work around here is slowing up some on account of winter setting in. We expect to put up several new high lines in the spring. Well, I'll knock off for this time, hoping the Brothers liked my line and if I don't get too many threats against my life I'll have in another piece for next month.

ANTHONY J. OFFERLE.

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**L. U. NO. 873, KOKOMO, IND.**

Editor:

Next Friday night is election of officers and promises to be a hotly contested affair if the number of nominations can be taken to mean a close race. This may be the last of yours truly as press agent, for the unexpired term of last press agent ends with election of new officers.

Conditions in Kokomo are about the same as last month. Boys only getting part time but happy as could be expected. No bright future ahead that we can see at present. We are full of hopes for next spring and time will tell whether we are to be disappointed or not.

Just a word for myself. I wish to thank the Editor for printing my poor articles when so much good stuff was coming in and thank all Brothers for reading them if you did. If you didn't can't blame you. No doubt the coming year will bring a real press agent which will in a measure make up for my poor efforts.

V. A. KRANZ.

**L. U. NO. 1037, WINNIPEG, CANADA**

Editor:

Another month has rolled around bringing with it the annual round of the Christmas and New Year's holidays, new resolutions, and lots of other things (including toys) which are usually made to be broken.

In my November letter I made a promise that I would make a proposition which would interest every member of the Brotherhood. Well, I didn't have my plans properly matured for the December letter owing mostly to the stern demand of supplying the necessities of life for a wife and three children, and the thorough laying of a foundation of what I think will go over big.

Now let's go. There must be many in the Brotherhood after working many years at the trade who have passed through most hazardous adventures and lived through them all, which would put the writings of Sabatini, Harte, Stevenson and other writers of fiction in the shade. Truth was ever stranger than fiction, and considerably more interesting, and who amongst us but what have at some time or other have experienced adventures which when we look back on the ordeal we wonder how we came out of it alive? Not only on our own continent of North America but over the entire world have some of our Brothers traveled which could be written in an entertaining manner for the delectation of our many readers. The manuscript could be submitted in any quantity to the Editor, who, of course, would be the sole arbiter of their destinies. He could print as many each month as he should see fit or as the readers demand, classing the stories for each month as first, second, and so on, each story to be printed on its merits. The local of which the author is a member would give to him or her as a reward one, two or three months' dues, or recognize such merit as it may see fit. Stories to be as true to fact as possible. Sex stories to be absolutely barred, only clean, wholesome reading permitted. We have the lineman away in the wilds by himself chasing trouble in blizzards, sleet storms and hurricanes. The inside wireman and fixture men in the hazards of everyday life in shop, factory or busy street. They all have a story to tell, some humorous, others tragic, some just entertaining. Now, boys, let's hear from you. Don't you think this would make a most interesting department of the JOURNAL?

Work has been fairly good up here this summer and winter so far. The telephones

are slowing up now and have laid off four temporary linemen. All other branches are still fairly busy with everybody working. The Winnipeg Electric Company still have their full staff working and I have not heard yet of any layoff. Winnipeg Hydro (City) are much the same. Bad weather all fall, followed by heavy snow this winter, with 20 below zero weather, have made it

better for the worker. Transportation has been severely hampered. The railroads have been bucking snow which usually doesn't trouble them till February or March which all tends to make more work which is better for everybody. Now, Mr. Editor, don't put this in the waste paper basket! Let us hear what everybody thinks of it.

IRVINS.

## AFTER A WHILE NO ONE WILL BE ABLE TO FOOL HIS OWN WIFE

A robbery was planned, committed, and detected, all within an hour recently and in the presence of almost the entire membership of the New York Electrical Society, the oldest electrical society in the United States. The occasion was a regular meeting of the society, at the Engineering Auditorium, 29 West 39th Street, at which meeting Dr. A. P. Link, instructor in psychology at Washington Square College at New York University, described the electrical apparatus and methods which have been developed for psychological tests.

Individuals selected from the audience were sent from the room with sealed instructions. These instructions required one of the individuals, chosen by lot, to commit a robbery in another room in the building. On the return of the group, Dr. Link subjected all of them, guilty and innocent alike, to a modern electrical "third degree." Emotions aroused by the guilt of the "robber" were made evident on the records of the apparatus. An electrical stethoscope, supplied by the Bell Telephone Laboratories, enabled the entire audience to hear the thumping of the heart of the person being examined. When the guilty person was asked questions touching on the robbery, which he had just committed, the quickened thumping of his heart was evident instantly.

A second method of detecting guilty excitement on the part of witnesses was demonstrated in the form of an apparatus for measuring the electrical resistance of the human skin. A moving spot of light thrown on a screen in full view of the audience shot clear across the screen when the person under test showed any excitement. Excitement lowers the electrical resistance of the skin. This is especially evident when an effort is made to lie or to conceal the truth. This reaction, Dr. Link explained, is entirely outside the control of the person being examined. With the Electrical Society's "robber" it supplied, as usual, a com-

plete "give-away" of the emotions which the "robber" was attempting to conceal.

A motion picture showing a railway collision, together with a series of similar "accidents," was thrown on the screen to allow the members of the audience to test their own accuracy of observation as witnesses.

That electrical psychological tests of these kinds are of great utility in industry as well as in the detection of crime was also urged by Dr. Link. One of the greatest wastes in the modern world, he said, is the waste of human material due to the presence of men and women in jobs for which their psychological character renders them unsuited. To correct these unfortunate instances of square pegs in round holes is one of the great tasks of modern practical psychology.

A number of the psychological tests, electrical and otherwise, which are now in use for selecting suitable employees, either for hire or for promotion, were demonstrated to the society. A complete street car front, equipped with a standard controller, as used by the New York Railway Company, was erected on the stage and connected with signal circuits, so that it was possible to determine the quickness of response of a candidate for a motorman's job in case of an accident to his car or of some signal or obstruction in front of him. Tests of this kind are now in wide use, it was explained, to eliminate unfit persons from jobs as motormen or chauffeurs.

All these methods of psychological testing must be put to use Dr. Link insisted, not as infallible guides but as mere assistants to general common sense. It is quite as possible to depend too much on the results of psychological tests, as to use them too little. Present day industries are apt, however, to make the latter mistake. Electrical methods in psychology ought to be used, the society was told, much more generally than they are at present.

**Four Faint Comets Now Visiting Us**

The earth is now experiencing the unusual astronomical event of the presence of four comets near enough to be visible at the same time. Were these celestial visitors large enough to be seen by the naked eye the assemblage undoubtedly would cause apprehension among the considerable part of the population which still regards a comet as presaging disaster, a superstition inherited from the days of belief in witchcraft and black magic. Fortunately for the peace of mind of the more credulous, the four comets now in our neighborhood are far too faint to be seen by the eye alone or even in the smaller telescopes usually available to amateurs. Even the great observatories, provided with large telescopes and with sensitive photographic plates, are

having difficulty in detecting the movements of our four visitors, so faint are these bodies. All four of the present comets are believed to have visited us before. Finlay's comet, the most familiar of the four, was here in 1886, 1893, 1906, and 1919. The comet named Giacobini-Zinner, the names referring, as usual, to persons associated with the discovery, visited the neighborhood of the earth in 1900 and in 1913. Neujmin's comet was here only once previously, in 1916. The fourth of the ones now visible, that named for Professor Comas-Sola, of the Barcelona Observatory, is suspected of being identical with a comet first seen in 1890, named Spitaler's comet and never seen again.

DR. E. E. FREE.



## IN MEMORIAM



### C. L. Bates, L. U. No. 51

We, the members of Local No. 51, have been called upon to pay our last tribute of respect to our Brother, C. L. Bates, who suddenly departed from us while in the performance of his duty, therefore be it

Resolved, That we drape our charter for a period of thirty days in due respect to his memory.

Resolved, That we extend our sympathy to his widow and family, that a copy of these resolutions be sent our Journal. That a copy be spread on the minutes of our local, and that a copy be sent to his widow.

WILLIAM E. REED,  
W. S. CHOCKLY,  
CHARLES PASS,  
Committee.

### Raymond Clark, President, L. U. No. 102

Whereas this sudden and unforeseen call of our Heavenly Father has removed from our midst our leader and revered friend and Brother, Raymond Clark, and

Whereas by his kind and genial disposition and manly principles he endeared himself to us all, engraving a lasting memory in the hearts of his innumerable friends and associates, and

Whereas we cherish the long relation held with him in the faithful and farseeing discharge of his duties, and his staunch defense of the ideals for which we are organized, and

Whereas, while we fully realize the irreparable loss to his loving wife and family, we know that our sorrow is but less intense than theirs; therefore be it

Resolved, That we extend to them our deepest and most heartfelt sympathy in their hour of sad bereavement, and

That the wisdom which our late Brother exercised in the leadership of our organization will always be held in grateful remembrance, and be it further

Resolved, That our organization charter be draped in mourning for a period of thirty days in respect to his memory, and that copies of these resolutions be sent to the bereaved family, to the International Office for publication in the Worker, and be spread upon the minutes of our organization.

ALVA BENNETT,  
JAMES E. TRUEMAN,  
PETER MUSE,  
Committee.

### Herbert E. Winslow, L. U. No. 296

Whereas it has pleased Almighty God to draw to a close the earthly life of our esteemed Brother, Herbert E. Winslow, and

Whereas in the death of this Brother, Local No. 296 suffers the loss of one who was a faithful member in time of strife as in time of tranquillity, and

Whereas, his family is deprived of one who was at all times and in all things loyal and true; be it

Resolved, That this local formally express its sorrow at the loss it has sustained and its sympathy for the members of his family; and be it further

Resolved, That the charter of the local be draped for a period of 30 days, that a copy of these resolutions be sent to his family, a copy be sent to the International Office and a copy be spread on the minutes of our meeting.

JOHN E. KELEHER,  
ORA A. KEITH,  
PAUL DUBOIS,  
Committee.

### Joseph Cuddy, L. U. No. 39

We are exceedingly grieved to hear of the sudden and untimely death of Brother Joseph Cuddy, who departed this life Saturday, December 18, 1920.

This sudden death has taken from our local a kind, meek, and much-beloved Brother. His companionship is going to be sadly missed by his many friends, and particularly those of us who have known him and were associate workers for the past several years.

Honesty was a cardinal virtue with him, his zealous union spirit and his manly character endeared him to his many friends.

He was always ready to aid his union and indeed made some rare sacrifices in the years

gone by, and earnestly labored for the promulgation and success of trades unionism. Therefore be it

Resolved, That in the death of Brother Cuddy our local has suffered an irreparable loss, of one whose genial smile and generous character will be missed by his sorrowing relatives and friends.

Resolved, That in their sad affliction we tender to his relatives and dear friends our heartfelt sympathy, for we, too, share deeply their sorrow in the loss of such a good friend.

Resolved, That our charter be draped for the usual 30-day period, as an expression of our tender sympathy in the loss of our departed Brother, and a copy of this resolution be sent to his bereaved family, and to be inscribed in the records of our local union and to be printed in our Journal.

JOHN HICKY,  
FRANK SCHÄUB,  
BERT SUTHERLAND,  
Committee.

### Edwin C. Irwin, L. U. No. 711

Whereas the members of Local Union No. 711 deeply regret the death of our esteemed Brother on October 31, and

Whereas Local Union No. 711 has suffered the loss of a true and loyal member; therefore be it

Resolved, That the membership of this local extend their deepest sympathy to his sorrowing wife, his relatives and friends; and be it further

Resolved, That we drape our charter for the period of 30 days, that a copy of these resolutions be sent to his wife, one to our Official Journal for publication, and one to be spread on the minutes of our local.

WM. H. MYERS,  
CHAS. M. HALL,  
J. W. DUNN,  
F. T. BENNETT,  
Committee.

### Peter Mattes, L. U. No. 9

It is with regret that we, the members of Local Union No. 9, I. B. E. W., announce the sudden passing of our late Brother, Peter Mattes; and therefore be it

Resolved, That we, the members of Local Union No. 9, extend our heartfelt sympathy to his family and relatives; and be it further

Resolved, That a copy of these resolutions be sent to his bereaved family and a copy embodied in the minutes of Local Union No. 9, and another copy forwarded to the Editor of the International Journal for publication.

EMMETT GREEN,  
DAN MANNING,  
HARRY SLATER,  
Committee.

### Henry McHannon, L. U. No. 84

Whereas Local No. 84, I. B. E. W., has been called upon to pay the last tribute of respect to the memory of one of its most worthy members, Brother Henry McHannon, who died Friday, November 19, 1926.

Death, with its relentless tread, has again entered the portals of Local No. 84, and summoned there one of our esteemed and beloved Brothers to his eternal reward. Brother Henry McHannon harking to his call from the Divine Bourne, from where no traveler ever returns. His unselfish character, his kind deep affection will ever remain fresh in the and generous nature, his light-hearted and memory of those who knew him best.

Whereas we recognize that in his untimely taking away, Local No. 84 has lost an esteemed and worthy member, the mother a loving and devoted son; therefore be it

Resolved, That Local 84 express our great sorrow at the loss of our departed Brother and extend our profound sympathy to the bereaved mother; and be it further

Resolved, That the charter of Local No. 84 be draped in mourning for a period of 30 days as a token of respect to his memory, and that a copy of these resolutions be spread upon the minutes of this local, and a copy be furnished to the mother of the deceased Brother. And also a copy be sent to the International Office for publication in the Electrical Worker.

J. W. FOSTER,  
E. P. BEAVERS,  
J. L. CARVER.

### Dean J. Byrnes, L. U. No. 134

#### A TRIBUTE

The taking away by death of a member of any organization is always a sad occurrence, but in the passing away of our late lamented Brother, Dean J. Byrnes, the I. B. E. W. has lost one of its foremost affiliated supporters, Local No. 134, of Chicago, Ill., a most loyal member, and No. 130, of New Orleans, La., a much-admired and revered Brother.

Dean J. Byrnes was born 44 years ago in Dallas, Texas, and when quite a youngster came to New Orleans, La., and adopted the electrical trade as his profession and being of a turn of mind resentful of the tyrannical methods employed by the bosses, he could see no remedy, except that which might be obtained through the efforts of the then struggling I. B. E. W. and Local No. 130, and recognizing these facts he became a member of Local No. 130.

Let it suffice to say that he took an active interest in all of No. 130's activities, eventually becoming business agent and as such conducting the business of the organization in such a manner as to command respect and confidence from both the membership and the employers.

About two years ago Dean, as he was affectionately known, decided to go to Chicago. Of course No. 130 regretted very much to lose him and his wise counsel, but he felt he was bettering himself and his request for a traveler was granted.

On Tuesday, November 15, 1926, Dean J. Byrnes passed away in the city of Chicago at Cook Hospital, his nephew, of New Orleans, being at his bedside at the time death took place.

The remains were shipped to New Orleans, accompanied by his nephew, Louis Schadowski, and interment held at Greenwood Cemetery in the family grave with a large attendance of members of Local No. 130 being present, with the following members acting as pallbearers: Percy Bates, Joseph Bourda, Gayle Schneidman, Henry Miller, Haus Wagner and Ward Sullivan.

And all that was mortal of "Dean" was put in the keeping of Him who knows best.

To Local No. 134, of Chicago, Ill., the writer, on behalf of the relatives of the deceased, wishes to gratefully acknowledge with the deepest degree of appreciation and with sincere thanks the many kind acts and attentions shown our dear departed, and we shall ever remember your thoughtful attention to the bereaved nephew while in your city and on behalf of Local No. 130 I wish to say, "Brothers, we are proud of you; you have been true and loyal even unto death, and you have demonstrated that the brotherhood of man exists in the ranks of organized labor. Glory be to you."

Dean J. Byrnes has taken his last traveler and when he presents it for acceptance in the Supreme Realm, the Great Counselor will admit him with this tribute:

"Well done, thou good and faithful servant. Enter thee into the Kingdom of Everlasting Life. You have been true to your God, to yourself and to your fellow man. Peace be with you."

M. M. MANDOT,  
Local 130, New Orleans, La.

### Gustave Ruckert, L. U. No. 875

Whereas the Almighty Father has called from our midst our Brother, Gustave Ruckert, and

Whereas this Local Union No. 875, I. B. E. W., feels in his passing a loss; therefore be it

Resolved, That we drape our charter in mourning for 30 days and that a copy of these resolutions be spread on our minutes, one sent to the bereaved family and one published in our magazine.

F. S. KING,  
Secretary.

### N. E. Hulme, L. U. No. 66

Whereas our beloved Brother and co-worker, N. E. Hulme, has been called from this life; and

Whereas while we bow in humble submission to the will of the Supreme Ruler of the Universe, we are touched with deep regret, for to know Brother Hulme was to love him; and

Whereas Brother Hulme had for many years given his untiring efforts to the true spirit of fraternalism and to the betterment of this organization, which was so near and dear to him, and it will be difficult to fill his place among the active workers of this order and in the hearts of his Brothers; and

Whereas Brother Hulme was known and loved by all for his big, open, tender and loving heart, his ever-genial smile, his splendid ability, his true spirit of friendship and

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## THE FOREMAN

(Continued from page 17)

underhanded; he would be straight and clean. If a man had worked on a job with all his energy, if he had torn his heart out to get it finished and delivery completed, Hewlett had invariably cut the price for the job afterwards; so that the unfortunate worker had to work always at that terrific pace to keep his wages up to the same level. He would stop that. If a man worked fairly, he would see that the prices were fair. But there would be no "fat" prices to be given out to favorites or toadies. He knew himself what constituted a good day's work and he would see, to the utmost extent of his power, that men working for him were paid according to that work.

Harry's lightly spoken remark, "You ought to take it, if you don't want to be called a slacker," had struck deeper than he knew. It was true. Deep within him Jack was conscious of his own worth. He was capable of more than to stand at a vice all day, filing and chipping. His union work had been to a great extent an outlet for this almost subconscious feeling; and now that the firm had offered him this opportunity of showing what he was made of, of carrying a whole shop on his shoulders, the thought leapt to his mind and would not be denied. Responsibility was what made or broke a man; it might mean harder work, more worry; but he would know he had achieved something. And, if he refused, the firm would merely think that he was afraid of the responsibility!

That had finally decided him; but he had overlooked one aspect vividly conjured up by the manager's words. As "custodian of the firm's interests," he might not only be forced to give up working for his union, but be compelled actually to work against it. Not only to leave off building, but to destroy. If that happened, what then? He made his mind up at once. He had accepted and he would go on. If any trouble arose in which he had to decide between the men and the firm, he would take the men's case to those in authority and plead it. They might listen to him; much more probably they would refuse. Then it would mean dismissal—and the black list. Well, he was prepared to face that if necessary; the only thing that mattered was that he must be fair, always be fair.

For the rest of the week he had walked about the shop with Hewlett, learning the routine work, the output that was expected each week, the work coming along, the jobs and the men that needed watching. It had seemed a chaotic affair at first, for his was not a department that manufactured anything completely, or even put together the finished machines. It obtained a great variety of parts roughly shaped from other departments and finished machining them; some of them were filed there and fitted to their gauges and then sent on again to the assembling shops for the finishing touches, so that it was not easy to keep in mind the run of the work. However, by the end of the week things had assumed a certain air of rhyme and reason and he had felt fairly confident. But Hewlett had been there with him then!

He was popular with the men, he knew; at least, their feeling for him, if not quite pronounced enough to justify him thinking that, was sound. They respected him for his straightforwardness. But two or three would be sure to endeavor to take advantage of his rawness. How would he act when it came to a personal encounter, man to man? True, he had had bitter arguments often enough with men at union meetings; but there he had known that many of the company were on

his side, supporting him. Here he would be entirely alone, except for what comfort he could derive from the thought of Gracey hovering in the background.

The stream of men in blue or in brown overalls, the mark of sleep still on their eyes, turned into the main gate of the factory, Jack in their midst. He started and squared his shoulders.

"Here goes," he said to himself, "for better or for worse—"

The heavy gates clanged. The unknown adventure had begun.

## IV

The speed at which the first day went by quite astounded Jack. His first task in the morning was to walk around the shop and take a general survey; to see that all the electric motors were started and that all the machine men and fitters were busy. He knew nearly all the men by name, but with their capabilities he was not so familiar. There were nearly a hundred of them altogether—sixty or so working machines and the other forty fitters.

The shop had been laid down on no ordered plan. Originally it had been only half its present size. Machines had been added singly from time to time, as opportunity offered or necessity dictated. Consequently it was not possible, as in most modern engineering shops, to stand at one end of a bay and see clear down its length, the machines in ordered rows on either side. The place was full of unexpected nooks and recesses, ideal for the man who wanted a stolen "smoke" or a rest while he should have been working, but meeting with not quite such approval from the foreman.

His office seemed to have been built in the most inaccessible corner, probably because it was a place into which it was manifestly impossible to fit a machine. Two sides of it were blank corner walls of the shop; the third, in which direction his desk faced, formed the end partition of the tool store. Directly outside the fourth by the door stood a huge planing machine, the only machine directly visible from the office. The unfortunate operator of this, being himself always under observation while the foreman was "at home," could console himself with the thought that he effectively screened the rest of the shop.

As Jack stepped out of the office, the sounds of an altercation rose clearly above the racket of the factory. He walked around the planing machine to where stood two small lathes worked by apprentices.

"Come on, 'and 'em over!" yelled one urchin.

"Sha'n't! Wot's the matter wiv yer?" replied the other defiantly.

"I won't 'arf give yer one if yer don't," shouted the first, preparing for combat.

"Now then there, what's the matter?" interrupted Jack.

"E's pinched my job," said number one.

"Tain't 'is job!" contradicted number two.

Jack surveyed the slate-colored box of small pieces of round bar steel that were destined to become "axis pins" when turned, the cause of the dispute. Not one of them had been touched.

"When did you get these?" he demanded.

"Sat'day mawnin', jest before time," said number one.

"Where from?"

"Ahit the component store."

"Who gave 'em to you?"

"No one. I 'adn't got a job, so I took 'em."

"Oh! Did you inform the storekeeper?"

"No, sir."

"Please, sir, 'e didn't," broke in number two. "I got 'em dahn orf the shelf, en I was just goin' ter tell the storekeeper, en

wile I was tellin' 'im, 'e came in and pinched 'em."

"H'm!" said Jack. "Rather a good job, aren't they?"

"Good job, sir?" asked innocence personified.

"Yes. Pay well?"

"Not bad," admitted number one grudgingly.

"I thought so. Well, we can't have you quarreling about them!" pronounced Jack. "You'd better both of you carry 'em back to the store and we'll find something else for you. Come along!"

"Silly fool!" whispered number one to number two in a subdued voice, but very earnestly, as they lifted the box.

"Fool yerself!" returned the other bitterly, as they staggered after Jack.

The majority of the men did their best that morning to make it easy for the new foreman, and stuck to their work. It is astonishing, with an unpopular foreman, how easy it is to waste time. Spanners and hammers can be lost or mislaid, and new ones borrowed from a friend at the far end of the shop. Belts can slip off their pulleys with most surprising facility, which means waiting until the beltman has come and applied a dose of "Black Jack" to make the belt grip. Or it can be discovered that the tool urgently needed is just the one that the shop store does not happen to have in stock, which again necessitates a wait while a boy runs across to the main store.

Hewlett had left the supply of laborers in the shop very low—a mistaken economy, for a mechanic will carry his work no further than from the ground to his machine table or bench. If it needs to be carried down the shop a little way, that's a laborer's job. Consequently it was quite usual to see half a dozen men doing nothing until a laborer should be available to bring their job to them. This morning, however, the sight was frequently observed of Mahomet going to the mountain—mechanics carrying their own work; Jack noticed it and was grateful.

Giving out jobs kept him busy for an hour or two. About ten, on going into the office, he found that the morning post from the main office had arrived. He took up a pile of "urgent" notes and went out again to look up the work that was to be hurried. Some of it he found well in hand and likely enough to be finished by the end of the afternoon. Some of the parts, however, were not started and in these cases it meant that the men to whom he gave them had to "break down" the jobs already on their machines in order to proceed with the new ones. A man naturally resents this; "setting up" a job on the machine table is frequently the most delicate part of the operation; and if, after partly machining it, he has to take it down, setting it up again afterwards becomes doubly difficult. Here, again, he found most of the men willing to help him, and in only one case did he have to cut into the complaints with a sharp command to "get on with the job."

Having got these straightened out, signed a few chits for tools, and helped one or two men who had difficulties with their jobs, he was astounded to hear the siren blow, and looking at his watch, realized that it was time for dinner.

"If all the mornings go as quickly as this one has," he said to his wife, as he sat down to his meal, "I shall be bald and you'll be grey before we can say 'Jack Robinson!'"

## V

Two or three weeks went by thus. Occasional lengthy interviews with Gracey, the works manager; shorter ones with the foremen of the shops with which his was directly connected; the careful study and compilation

of progress lists, on which the state of certain particular jobs was to be entered from day to day; a mass of other office routine work, and the general supervisory work of the shop conspired to make the time fly by with extraordinary swiftness. He increased the number of laborers in the shop, and, except for one or two reprimands he was forced to administer for bad work, surreptitious smoking and the like, no unpleasant incidents occurred. He began to think his qualms as to accepting the post were groundless, when one day a cloud arose in the sky, which, though not in itself much bigger than a man's hand, was threatening in its implications.

On his desk one morning he found a note from the progress office marked "Imperative," which read:

"With reference to batch of Cylinder Heads, No. 15628, 25 off, which are being machined in your department, delivery *must* be made to Assembly Department by 5 o'clock tonight, Wednesday, in order that delivery under our contract may be made by Saturday next."

Pinned to it was a further note from Gracey:

"Your delivery was originally required by Saturday, and you should have been notified before of the increased urgency. I am seeing the Progress Department about the matter. In the meantime, put every lathe in the shop on the job if necessary to get it finished!"

Jack remembered the cylinder heads. He had given them to a turner to machine on the previous Thursday; they could easily be finished at the rate of four a day, which would have enabled them to have been delivered well up to schedule time. He walked quickly down the shop to see how they stood.

The lathe on which they were being turned stood next to that on which Harry worked. As Jack neared it, he realized with a start that the man was not there, and the machine had not, to all appearance, been used that morning.

"This chap not in?" he asked Harry.

Harry said that he was not. Jack examined the pile of heads; nineteen were finished, one was in the machine half done, five remained untouched. Now, it is one of the strongest unwritten laws of the workshop that the man who starts a job shall finish it. No one shall take it over halfway through. And in a shop where the prices paid for the work are on a time limit, this is a sound rule for several reasons. Suppose, for example, that the job is a good one—that is, one on which the workman can make half as much again as his normal rate of pay. He is allowed, we will say, four days to do it in, which means that however short a time he may take over it, he will receive four days' pay for it. One man starts on the job and in the first day half finishes it. He has saved a whole day so far. A second man, taking over the job the next morning, the first being absent, may take, through laziness or incapability, the whole of the remaining two days to finish it, thus saving nothing. Yet, because each man is paid in strict proportion to the time he has spent on the job, the incompetent man receives pay for two-thirds of the day saved on the whole job, while the man who really earned it, receives pay for only one-third.

Or, again, suppose that two men, in the same way, share a batch of twenty pieces. If, on the completion of the job, four are found to be spoiled, who is to say which spoiled them? Even if the blunderer be honest and own up, the time allowed for the four is subtracted from the total, and the remainder divided between them in proportion to the hours worked. So here the bad workman, being probably also the slower,

benefits doubly in getting a higher proportion owing to his longer time and having more than half his penalty accordingly placed on the shoulders of the other man.

Or it can be, of course, the other way around, and a man told to finish a job already "spoiled" by the slow workman who started it.

Jack knew this; he had himself refused occasionally to handle work on some such ground. He knew that in these cases the system became shockingly unfair; but he also knew that it was exceedingly difficult to get anything altered that was ordained by the powers above the shop foreman. The works' management would not, as a rule, listen to a grievance of the men unless they were sure the men meant what they said; the only thing they recognized as proving the men in earnest was when a strike was declared; and then, of course, the strikers ceased to be men with a grievance and became Bolsheviks—reasonless creatures, to be subdued at all costs. However, this was a special occasion.

"Look here, Harry," he said, "drop that job you're on and get on with these. They're a rush job; they must be out by tonight."

Harry shook his head.

"Sorry, Jack, can't be done," he said.

"I know it's a rotten job," said Jack. "But there it is. It's got to be done. So just slip into it, that's a good chap."

"D'you know why that fella's out?" asked Harry. "His eldest girl, who's been ill so long with consumption and who he's been sending all over the place trying to cure her, was taken worse yesterday. Not expected to live the night. I expect she's dead by now. That's very nearly a double-time job and I know he's damned hard up. I'm not going to pinch a good job from him."

"It's not a case of pinching a good job," returned Jack with some asperity. "The best part of it's done, and what is left I want done quicker than he's been working. Somebody'll have to do it if you don't. I tell you it absolutely must be done!"

"Well, I'm not going to do it, and that's flat," said Harry. "You know jolly well you wouldn't have done it yourself at one time."

Jack turned away angrily; he called another turner who accepted the job without demur or audible comment, and went back to his office.

What had made Harry behave so ridiculously and stubbornly? he wondered. He sympathized with his general attitude and he was sorry enough for the absent turner; but nobody could say he tried to make a practice of splitting jobs, and as for the other man, well, he would treat him as generously as he could for the next week or two. But Harry ought to realize that he, Jack, must, now that he was responsible for the shop, regard the work and the men as impersonally as possible. He need not, it is true, risk being accused of lack of consideration; but he must certainly not allow himself to be swayed by favoritism. And, hang it all, Harry had been keen on urging him to take the post. Why the devil did he want to throw it up in his face now, that he was acting differently from what he once did? They had both known that that was unavoidable in some matters.

The feeling of irritation lasted all day, changing subtly during the afternoon from being directed against Harry personally to a vague rebellion against the circumstances that seemed likely to interfere with their friendship. After all, it had been Harry's waywardness and lack of resolution that had made them such chums since boyhood—a case frequently met of the alliance of a stronger and a weaker mind, one supporting, one needing support. And now, because Harry had shown a wholly unexpected firmness and

determination, he was angry with him! Still, he might have shown it at a more opportune time, gnawed the maggot; it was hardly firmness, it was stubbornness.

He was still so undecided in his mind at 5 o'clock that evening that when Harry poked his head in the office door and asked if he was going home, he pleaded that he had some office work that would keep him for half an hour.

## VI

Jack was informed by his wife at Saturday dinner-time that she and Mrs. Lee had arranged a picnic for that afternoon. They were all to meet at the station at half-past two, go down to the Heath by train and spend the rest of the day by the lake. There was a train home at half-past eight, which would do nicely.

"So buck up and get washed and changed," she concluded; "we haven't got too much time."

The sun was shining brightly when they arrived at the lake, with a few white clouds in the blue sky—a perfect spring day. The heather around was dotted with girls in white frocks and men in straw hats, though a great number of the more cautious carried mackintoshes and umbrellas. The air was full of the sound of shrill cries and laughter from the numerous players of rounders, hide-and-seek, stump cricket and the like.

Harry and Joan, aged ten and eight respectively, Jack's two eldest children, immediately pulled off their shoes and stockings, grasped the jampots and fishing nets they had brought with them and set off to the water's edge in quest of tiddlers. The elders settled down for a long loaf in the sun, the two toddlers playing by them with a ball.

"Whatever was the matter with you and Harry this week?" said Mrs. Lee to Jack. "He came home in a terrible state one dinner-time this week, carrying on like mad. Said you were as bad as the rest of them and I don't know what. He was all right again by tea-time, though."

"We had a bit of a row over a job," said Jack reluctantly. "Nothing much."

"Thought you two knew each other better than to have rows," said Lil. "Mind you don't go having any more, now!" smiling.

"We'll do our best," said Jack, smiling back. "Don't you worry."

The afternoon went off as such afternoons do go. The babies' romps frequently resulted in tears, quickly dried with kisses. The two elder ones ran up occasionally, with wet knickers or frock, to exhibit some specially good catch. A perambulating ice cream merchant was hailed with delight. Great quantities of sun-dried sandwiches and cake, at which noses would have been turned up at home, were devoured. At length Harry, looking at his watch, declared that it was time to start for home.

As they neared the station, he said to Jack: "I've been thinking about that job during the week. I'm afraid I was a bit stupid, but I was feeling pretty upset about old Jim Roley and his girl at the time."

"Well, I've been worried a bit about it, myself," answered Jack. "You were right in a way, too. But it can't be helped. Let's say no more about it, old man, and forget it."

"Righto," said Harry. "Let's have a drink on it." He called to his wife as they reached the station: "Jack and I are going to have a drink. We've got a quarter of an hour."

They turned into a neighboring public house. Harry called for two pints of ale.

"Hold on," exclaimed Jack, laughing; "half will do me all right."

"Let him get it now," returned Harry. "I'll finish it for you if you can't manage it." The drinks arrived, and pledged each

other, touching glasses. Harry quaffed his almost without taking breath. Jack, being thirsty, contrived after all to get rid of his first and called for a return draught for Harry.

"Couldn't drink another drop myself," he explained.

On the completion of his second pint, Harry was beaming.

"Come on, old man, be a sport," he said. "Have another!"

"You won't be much of a sport if you leave the women and kids waiting in that station for another hour through missing this train," returned Jack. "Buck up, or we shan't catch it."

Harry's volatile spirits were just sufficiently enlivened for him to inform Mrs. Marsh all the way home in the train that he and Jack were great friends; if anybody said they weren't, she was to tell them to go to blazes; they were the best friends ever, weren't they, Jack?

On getting out of the train he pressed Jack to come and have another little drink. "Do you all the good in the world, old man?" Jack was beginning to find the situation embarrassing, but his wife came to the rescue.

"Look here, Harry Lee," she said, "it's now 9 o'clock. Those three kids of mine have got to be in bed by 10 and they've all got to be bathed before that. And I can tell you they're much too big a handful for me to tackle now."

"Oh, all right," said Harry. "I only wanted to drink his health. I don't care, bless you."

They exchanged "good-nights" and the two parties separated. Harry whistling gaily as he marched up the road, with the baby on his shoulder, and his wife on his arm.

Mrs. Marsh looked after them.

"I don't know what's coming to Harry," she said. "He's still jolly and nice to talk to, but he's different somehow. I think he drinks too much, don't you?"

Soon after 10 Mrs. Lee knocked at their door.

"Jack," she said, "I wonder if you'd come and get Harry home for me. I know I'm an awful nuisance, but I don't know what to do. He went into a pub just up the road after we'd left you, to drink your health, he said, and promised to be home in a minute. He's still there." She burst into a sob. "Oh, I wonder why he does it. He didn't used to when we were first married."

"Poor old Lil," he said compassionately. "Of course I'll get him home for you."

He put on his cap, and walked up with her to the "King's Arms."

"Run on home," he said. "I'll bring him along."

He went into the bar, and found Harry sitting alone on a bench almost asleep. He put his hand on his shoulder.

"Coming home, Harry?" he said.

"Lo, Jack," said that individual, after regarding him for a minute with glazed eyes. "L'sh 'ave a drink."

"No, come along home!"

Harry's mood suddenly became combative.

"No, com'n," he said. "B'cause you're forema—think I'm com'n? Washa marrer?"

Jack took hold of his arm, and lifted him to his feet. He was too helpless to resist effectually and, somebody opening the door for them, Jack managed to get him outside. The fresh air revived him a trifle, and he began to adopt a maudlin, bellicose attitude, striking one or two weak, ineffectual blows at the air and muttering thickly about "Foreman" and "Washa marrer."

By the time they reached his home he was weeping on Jack's shoulder and calling him "Ol' frien'." Jack helped his wife get him upstairs and took his leave, sorely worried.

Harry was slipping away from him. His drinking fits were becoming more frequent, and his time-keeping at work consequently suffered. He knew it would be useless to remonstrate with him about it. Harry would turn it off with a joke and say he wasn't likely to get drunk again—and believe it himself. And this was the second time he had thrown his foremanship up at him, soon after swearing eternal friendship, too. True, he was drunk—but something must be rankling at the bottom of his mind. Great Scott, was he jealous? Did he think the post should have been given him? It couldn't be. He had been so hearty in his congratulations. And yet it looked wonderfully like it!

Jack Marsh did not sleep at all well that night.

## VII

Some days later Gracey came into Jack's office during the morning, and placed on his desk a bulky object of steel.

"This is a fixing we're having made for the electrical department," he said. "I want you to get these holes bored."

He produced a drawing from his pocket and pointed out the holes. There were three of them, and they were drilled in adjacent faces of the fixing.

"They are most particular," went on Gracey. "The drawing will give you the dimensions and they must be dead exact. The holes must be, of course, absolutely at right angles to the faces."

Jack looked at the fixing and pondered. It was a most difficult job, needing great care and delicacy of touch. In addition, it had already had much work done on it and was therefore worth a considerable sum of money. Harry had the reputation of being the best turner in the shop—the best all-around mechanic, in fact. He had better give it to him and let him do it on the face-plate of his lathe.

"It goes without saying," added the manager, "that it's in a great hurry. Get it done right away, will you? They're waiting for it in the electrical shop."

Jack nodded, and the manager turned to go out. "Oh, by the way," he said, turning back, and drawing a folded paper from his pocket, "I got the time office to draw me up a list of the worst time-keepers in the works for the last month. The men seem to have been getting very slack lately. You'd better warn these fellows that, if they don't improve in the near future, we shall have to dispense with their services."

He placed the list on the desk and went out. Jack opened and glanced at it. Harry's name, like Ben Adhem's, led all the rest.

He took the fixing down the shop, placed it, with the drawing, on Harry's lathe, and gave him full instructions as to what was wanted. He said nothing just then about the time-keeping; he wanted Harry to give his full mind to the job in hand.

When Jack had gone, Harry looked at the job with some anxiety. It was a delicate and valuable piece of work and demanded steady nerves; neither his nerves nor his hands were as steady this morning as they should be. However, he would do his best.

He went to the stores, obtained the tools and gauges he needed and set to work. By dinner-time the job was half done and was quite correct so far. He went home in almost a jaunty frame of mind.

The afternoon wore on and he was boring the last hole. One more cut, and then the reamer, he thought. He pulled the lathe tool out of the hole, re-set it, and let it run in again. Then he tried the hole with his callipers.

It was too big! He stared at it for a moment, and then laid his callipers against the rule once more. Too big! He tried the

callipers in the hole again and again, but always with the same result. By the time he had cleaned it up to get a smooth inside surface, it would be about a sixteenth of an inch too big. And he was not allowed a thousandth! He examined the job. Could it be bored out a lot larger and a liner pressed in? No! If he did that it would break through into one of the other holes. Nothing could be done with it. It was a scrap!

Harry looked round to see if any one were noticing him. Nobody was. He took a pin from the bottom of his waistcoat, and scratched on the blue print, beside the figure giving the size of the hole, a little "1/16" so that the dimension read, "2 1/16." Then he smudged it over with his greasy forefinger, so that the whole was very difficult to read.

He finished the inside of the hole and took it up to Jack's office.

"Right!" said the foreman. "Leave your gauges here as well, will you? Is it all right?"

"I think so!" said Harry and went away.

Jack took the fixing up and looked at it. Harry had made a good job of it, he thought, with a glow of satisfaction. He took up the two-inch plug gauge and tried it in the holes. "A dead fit," he thought of the first, then of the second. In the third the gauge rattled about.

His heart almost stopped beating. Harry had left another gauge with him. He picked it up and looked at it. It bore the inscription, "2 1/16." He tried it in the hole. It fitted.

A sweat broke out on his forehead. "But I told him they were all two inches in diameter!" he cried aloud.

"What's that?" said a voice behind him.

He turned in his seat and saw Gracey.

"Ah!" said the latter, seeing the fixing in front of him. "I was just coming to see if that was finished. Is it right?"

Jack could find no words to reply, but handed him the plug gauges silently. He looked at them.

"What's this?" he cried. "Two and a sixteenth? D'you mean to tell me they've been made to this?"

"One of them," said Jack dully.

"Oh, damnation!" exploded Gracey. " Didn't I tell you they were all to be two inches? Didn't the drawing tell you so? Look here!"

He pointed to the dimensions on the print and thumped his fist on the desk.

"Wait a minute," said Jack, "that certainly looks like two and a sixteenth there—that smudged one. I didn't look at the dimensions closely this morning. I told the chap two inches, as you told me."

Gracey took the drawing and examined it. "That's been altered!" he shouted. "I know it should be two inches and, what's more it was two inches this morning. I went over it very carefully. Don't you see what the fellow has done? He's bored the damn thing big and then tried to save his bacon by fooling about with the drawing! It's scrap! There's no way of saving it!"

"I'm afraid not," said Jack.

"Well, you'd better sack the man on the spot. It's bad enough to scrap the thing, but to try to get out of it that way—" His speech left him and he went out of the office, slamming the door violently.

Jack sat staring in front of him for some minutes, his brain numb. Then he tapped at the window for the stores boy.

"Fetch Harry Lee here!" he said.

Harry came in, his head well up in the air and his chin stuck out. Jack looked up at him.

"What did you do it for, Harry?" he said.

"Do what?" asked Harry, innocence itself.

"Alter the drawing," said Jack. "Harry,

old man, why the hell did you do it?" The words rushed out in a torrent.

Harry's gaze dropped and he stuttered, "I—I—" and lapsed into silence.

Jack went slowly, speaking each word with an effort.

"If you hadn't done that I could have saved you. But I can't now. Gracey's seen it. I must give you an hour's notice."

"What?" shouted Harry. "Sack me? No, Jack, old man, don't! Don't! Think of Lil and the kid. I shan't get another job for months. Jack, we're pals, aren't we?" He seized Jack's shoulder and shook it.

Jack groaned.

"I must, Harry. I can't get out of it. Harry, you fool! You're the first man I've had to." He stared with vacant eyes out through the glass into the busy shop. Harry stood and looked at him a moment and then went out. Jack started as the door shut, and reached slowly for the telephone.

#### VIII

He was late that night going home. As he went he met Lil suddenly at a corner. Her eyes lighted on him and went past him. "Lil!" he cried appealingly, and held out his hands. She did not appear to see or hear him, but drew her skirt slightly to one side and walked steadily down the road.

#### START DRIVE TO PUT MORE BABIES TO WORK

(Continued from page 26)

cal and mental growth. No educator really believes that allowing the inferior children to leave school, after the required number of years of academic failure, is a good educational policy. It has been allowed to go on merely because the school has not known how to meet the situation.

"The manufacturers regard the child primarily as a wage-earning unit. To the educator he is very much more than that. His ability to earn a living is but a small part of his preparation for life and one that for children of limited mental capacity requires little or no training. It is ability to live harmoniously, to be a good member of a family, to take his enjoyment wholesomely, to contribute to community progress, that requires the training. Herein lies the real function of education. If education has failed up to this time to accomplish this result for some group the remedy is not doing away with education. It is in making it more efficient."

Of the child as competitor for working people little need be said. Labor's whole effort is to maintain a high standard of wages, working conditions, hours of employment. Labor wants to keep out the hordes of European workers—cheap workers who would depress hard-gained standards. Labor wants to limit the hours of production so that there may be jobs enough to go around and time enough for rest and recreation, to maintain health. But labor must not forget to protect itself from one more factor—the labor of our children. Child labor cheapens the standard.

There is no need for children under 16 to be working in prosperous America. We don't need them. And labor must do its part to see that the National Association of Manufacturers doesn't get them. The place to work for child labor legislation is in your own state legislature.

Many Chinese believe that silkworms are afraid of strange people, and if strangers call on silkworm growers while the worms are in the feeding state, the family hastens to burn incense to avert possible evil.

#### LUGUBRIOS LYRICS

Referring to recent bank failures in Minnesota, from the Minnesota Union Advocate—

##### Ruthless Rimes

Willie had a little bank,  
'Twas filled clear up with money;  
He closed it up one summer day—  
Now wasn't that too funny!

Sam had money in the bank  
No rainy day could hurt this fella;  
(The banker left for parts unknown  
And Sam without an umbrella).

Old Mother Danker went to her banker  
To draw out a couple of bones;  
But when she got there  
They gave her the air,  
For deflation had frozen the loans.

Little Jack Horner  
Had a bank on the corner,  
And all that he got was pie;  
He closed up one night  
And departed from sight,  
And he said: "What a smart boy am I."

##### Crooked Dough

Kit—"He cleaned up a big fortune in crooked dough."  
Kat—"He was a counterfeiter?"  
Kit—"No, a pretzel manufacturer."—Elevator Constructor.

Nothing is so contagious as enthusiasm; it moves stones. It charms brutes. Enthusiasm is the genius of sincerity and truth accomplishes no victories without it.—Lyton.

#### Beam Radio System

#### detects sunspots

Operation of the "beam radio" system between England and Canada has supplied new evidence of the effect of sunspots on radio. The beam system consists of radio transmitters which send virtually all of their emitted energy off in one direction, toward the country which it is intended to reach, instead of spreading it broadcast in all directions. The radio energy forms a "beam" between the two stations, like the beam of a searchlight. On several occasions this winter what are called "magnetic storms," when the earth's magnetism is greatly disturbed, have accompanied weakening of the radio beams. It has long been known that these magnetic storms are related to sunspots, probably being caused by streams of electric particles shot out with enormous speeds from the great solar storms which we recognize as the spots. In a recent letter to the London scientific journal, *Nature*, Captain T. L. Eckersley, Chief Engineer of the British Broadcasting Company, suggests that these same electric particles are responsible for weakening the radio beams. High up in the earth's atmosphere these electric particles from the sun create an electrified layer. As the radio waves of the beam pass through this layer they cause the billions of electric particles to vibrate back and forth, and to hit against each other. This results, Captain Eckersley argues, in a loss of energy from the radio wave which sets the electric particles to swinging. A sunspot means more electric particles and more loss.

Dr. E. E. FREE.

## FOR SAFETY—USE "JIFFY" TOOLS!

### The Safest and Easiest To Use



#### JIFFY SOLDER DIPPER

Solders and tins joints quickly and easily. Doesn't waste solder, burn the insulation, or smoke the ceiling and walls. Since swinging cup remains upright under ordinary conditions, danger of painful solder burns is eliminated.

"Jiffy" Dipper will last a lifetime. It solders from 50 to 60 joints with one heat, due to the specially constructed, heat retaining cup which can be heated over any kind of a flame in two minutes.

#### JIFFY PLASTER CUTTER

Cuts clean round holes in plaster for ceiling or wall outlet boxes on old-house-wiring jobs. Made of aluminum. Light weight with special apron to keep dust out of your eyes. Cuts holes for 3 1/4" and 4" boxes.



Write for The New Jiffy Line Bulletin describing the complete line, also giving details of our guarantee of "satisfaction or your money back."

**PAUL W. KOCH & CO.**  
LEES BUILDING

CHICAGO, ILL.

## RADIO

## Running Story of Recent Radio Advances

(Continued from page 13)

the two ends are straightened out as shown in the diagram. Soldering lugs then can be attached to the ends of the coil, or the ends can be flattened with a hammer and holes drilled in them.

The coils are insulated from the panel or baseboard by means of porcelain General Radio stand-off insulators. Coils of this type are more than sufficiently rigid to meet all requirements.

For use in the tuned-grid tuned-plate transmitter described above the coils will have the following number of turns, the diameter of the coils being 2 inches:

80 meter band: L has 6 turns, L1 has 12 turns and L2 has 12 turns.

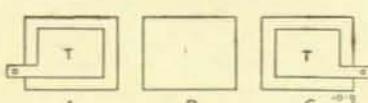
40 meter band: L has 6 turns, L1 has 8 turns and L2 has 8 turns.

20 meter band: L has 6 turns, L1 has 4 turns and L2 has 4 turns.

The above table assumes a capacity in C and C3 of at least .0003 mfd. and preferably .0005 mfd.

## Types of Transmitting Inductances II

The capacity between turns in a transmitting coil should be as low as possible since a high capacity here will cause the adjustments in grid and plate circuits to



(FIG. 5)

affect the wavelength to which the circuit is tuned, to a serious extent.

In all cases it is desirable, for this reason, to space the conductors in a transmitting inductance by a distance equal to at least to the diameter of the wire or of the tube, in the case of copper tubing.

A much better method of making the coils is to use flat strip, winding it on insulating supports so that the flat portion is against the strips. If the conductor is spaced by a distance equal to the width of the strip the distributed capacity of the coil is materially reduced and the ease of adjustment increased.

For all tubes up to and including a pair of 250 transmitting "bottles" the conductor can be a strip of brass or copper three-eighths of an inch wide and a sixth to a fourth of an inch thick. For lower power sets (from 7½ watters to two 50 watters) the strip can be ordinary Ford magneto coil material obtainable from any Ford agency in the form of burned out coils. Each coil will furnish about ten feet of the strip which is of copper and a quarter of an inch wide.

The insulation can be any hard wood (maple preferably) having a cross section of  $\frac{1}{2}$  by  $\frac{3}{4}$  inches, the  $\frac{1}{2}$  inch dimension being the "width" of the wood. Six strips

are required for each coil. The end pieces are hard rubber or bakelite rings cut from a length of tubing having an outside diameter of 3 inches, and a wall thickness of one-eighth inch. The strips (insulating) are attached to the rings by means of 6-32 brass machine screws an inch long. The insulating ring ends can be from  $\frac{1}{2}$  to 1 inch long.

The exact number of turns required in the coil for transmission will depend upon a number of factors, mainly the type of circuit to be used, the number of tubes to be used and the size of shunt condenser used in tuning. For the coupled Hartley circuit with a shunt tuning capacity of .00025 mfd. the coils in the primary (or oscillator) will have the following number of turns for the different amateur bands.

For 80 meters, 14 turns; for 40 meters, 10 turns; and for 20 meters, 5 turns.

## Types of Transmitting Inductances III

The spiral pancake inductance was formerly widely used in transmitting circuits but, due to its high distributed capacity, it is not used much nowadays. In addition as the successive turns are of a different diameter it is rather difficult to keep track of the change in inductance when a turn at a time is changed in the circuit.

For use in secondary (or antenna) circuits, however, the spiral inductance is quite handy. It does not take up a lot of useful space, and the disadvantages outlined above do not apply when the coil is used in this portion of the circuit.

For use in the antenna circuit the inductances should be wound with copper or brass strip having a width of one quarter of an inch. The thickness of the metal is immaterial, as long as it is such that the coil will hold its shape under slight pressure.

The supporting strips are preferably made of maple, having a width of one-half inch and a "depth" of three-quarters of an inch. The turns should be spaced a quarter of an inch. The spacing is first laid out on the wood strips (after they have been assembled and screwed together) and then narrow hack-saw slots are cut to a depth of  $\frac{3}{16}$  inch and the conductor driven into the slots. Do not hit the metal strip directly with a hammer or you will bend it. Use a block of wood against the inductance, lightly tapping the wood until the strip sinks to the bottom of the hack-saw cut.

The number of turns in the antenna circuit is not at all critical since the major tuning adjustments can be made in other portions of the circuit. An inductance having twelve turns of brass strip constructed as explained above should be satisfactory for use in all of the amateur bands.

Two brass angles can be screwed to the transmitter baseboard and the inductance supported on these by means of a machine bolt passing through the inductance insulation and the angles.

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*(This department is conducted by special arrangement between the Electrical Workers Journal and the American Radio Relay League, Inc., the national organization of radio operators and experimenters, through Science Service.)*

Wild horses, said to be descendants of the Barbary ponies brought here by Sir Walter Raleigh's colonists, are found roaming over the Hatteras Banks of North Carolina.

## THEATRE ARTISTS FIND "THE PAY" IN ORGANIZATION

(Continued from page 7)

tector of all dramatic and musical comedy actors.

In the next two years it was borne in on Equity that only in the discipline and responsibility which goes with a universal membership could it find real safety, and so that form of the closed shop which the stage knows as Equity Shop was evolved.

Briefly it provides that in all companies to which it is applied Equity members will work only when all members of the company are members of Equity in good standing. But while it is a closed shop it is an open union, for Equity has promised to admit to membership any person offered a part in any production by any manager.

This Equity Shop policy was first tried out with stock, tent and repertoire shows and was finally instituted against all production managers not members of the Producing Managers' Association. The latter although specifically exempted for the life of the Basic Agreement, or until 1924, met this move with a claim of infraction of the Agreement, which claim was arbitrated before Federal Judge Julian W. Mack in the summer of 1921. In his award that jurist declared that Equity Shop constituted no infringement of the Basic Agreement, and going even further, asserted that it was in no way contrary to sound public policy.

As the Basic Agreement neared its end the Producing Managers' Association was informed that Equity intended to institute Equity Shop in all classes of production after June 1, 1924.

The negotiations which followed led to a split in the ranks of the Producing Managers' Association. Some of the more enlightened members, or those who had suffered most heavily in the strike of 1919, were unwilling to go through another disastrous war. When a group in the organization known as the Round Robins blocked an acceptance of Equity's proposal, these managers formed the Managers' Protective Association, and concluded a ten-year agreement with Equity in May, 1924.

The remainder of the Producing Managers' Association went through with its plans for a finish fight. Its members appealed to the courts through their own organization and the Actors' Fidelity League seeking to enjoin the agreement between Equity and the new Managers' Protective Association. They permitted the closing of seven productions on June 2, and sustained a losing fight throughout the whole summer of 1924.

But all the court decisions went against them, and Equity was too strong to be fought successfully. Unable to survive this second defeat the Producing Managers' Association has since disbanded.

## Movies Yet to be Won

Equity, then, in the last two years has been in a pretty good position in the dramatic and musical comedy field. It has been able to enforce a virtual closed shop, exempting by name a handful of members of the Actors' Fidelity League and conscientious objectors, and issuing contracts generally conceded to be fair and equitable to both managers and actors. It has been able to assure the performance of these contracts through its practical control of the reservoir of talent which is in its membership.

The motion picture studios are not yet organized completely although Equity has been awarded jurisdiction over the motion

## NO JOKE TO BE DEAF

**Every Deaf Person Knows That**  
I make myself hear, after being deaf for 25 years, with these Artificial Ear Drums. I wear them day and night, and stop head aches and ringing in the ears. They are perfectly comfortable. No one sees them. Write me and I will tell you a true story, how I made Medicated Ear Drums you hear. Address: GEO. P. WAY, Artificial Ear Drum Co. (Inc.), 235 Hoffman Bldg., 2339 Woodward, Detroit, Mich.



picture actor by the American Federation of Labor, and has a partial organization in the field.

Equity's influence in that field, however, is greater than is generally recognized. Its very existence, and the presence of a branch office of the organization in Los Angeles, have combined to prevent a great deal of the injustice which might have been attempted had there been no policeman on the beat.

Motion picture actors are beginning to be aware of the value of Equity's support in matters which are in dispute between themselves and their managements, and in an increasing number of instances are their controversies brought to Equity. They are finding that motion picture producers are anxious to settle with Equity without a contest, and where arbitration is demanded Equity is winning most of its motion picture cases.

Apart from its services to individual members Equity has helped the entire motion picture field by its vigilance in the matter of inimical legislation. Within a comparatively recent time five bills introduced in the California Legislature which would have severely hampered the motion picture actor, and would thus have injured the entire business, were defeated solely through the activity of Equity, and with the assistance of California State Federation of Labor.

Extras and atmosphere players, also, have found Equity sympathetic to their troubles and helpful in adjusting their problems. The recent creation of a central casting bureau to meet their needs was accomplished to some extent with Equity's help.

Very definitely the Actors' Equity Association has a great deal to offer the motion picture actor. The actor in that field who fails to recognize it by that failure proclaims a short sightedness which may yet give him cause for regret.

Quite naturally Equity's varied experiences in its admittedly brief life have definitely sold it on the matter of co-operation with organized labor in all directions.

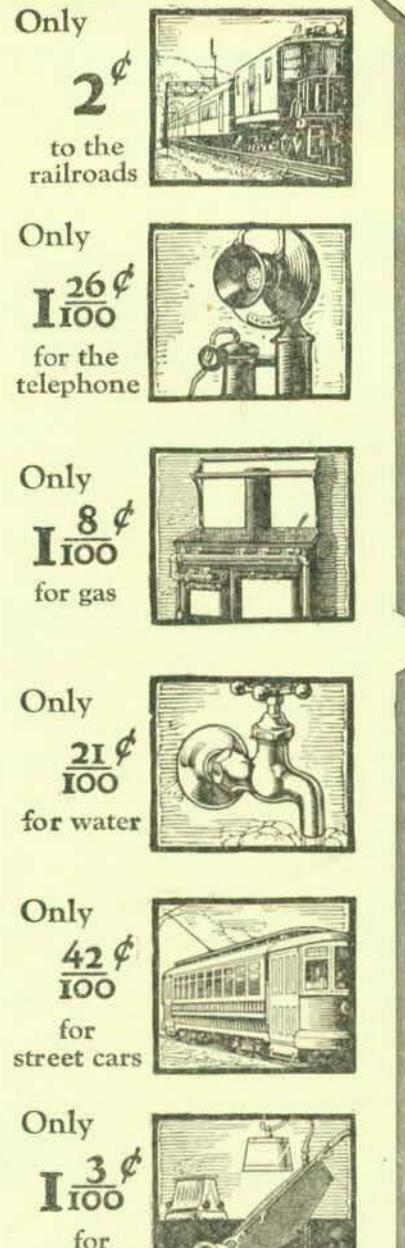
It has recently been negotiating with Will H. Hays for the extension of Equity Shop to the motion picture studios, and it is heartily in sympathy with the demand of the electrical workers and their allies for a complete organization of these studios.

The motto of the Actors' Equity Association is: "All for one, and one for all." What better union label than that?

### Eighteen Industries Are Represented at Brookwood College

Eighteen industries are represented by the students of Brookwood Labor College which opened in October for its sixth year. Painters, garment workers, miners, upholstery weavers, hosiery knitters, railway carmen, stenographers, bakers, tailors, machinists, electricians, cap makers, carpenters, clerks, plumbers and even taxi drivers are included. Jack Rubenstein, Local 3, I. B. E. W., is one of the entrants.

"The Brookwood students represent a cross section of the labor movement geographically as well as industrially," said A. J. Muste, chairman of the faculty. "They come from California and Oregon, from Wyoming and Colorado, Delaware and Maryland, Illinois and Minnesota, Kentucky and Texas, Massachusetts, Pennsylvania and New York. There is even one from England and another from Canada."



*and out of the family dollar all these cost only 6¢*



Cheap electricity is essential to the low cost of these public services. For a quarter of a century the G-E monogram has been on the apparatus developed to make electricity and turn it into useful light, heat, and power. It is on the big motors that run trolleys and trains, that pump gas and water—on MAZDA lamps and on the little motors that do the work of the home. Look for it when you buy electrical equipment.

## GENERAL ELECTRIC

95-258C

Brookwood offers one and two-year courses to trade union workers and others interested in organized labor and farmer movements. The course of study includes economics, labor history, English, psychology, trade union organization, public speaking, and a study of the basic industries. Many of the students come on scholarships from their local or international unions, though some come at their own expense.

"Of the men and women who have been graduated from Brookwood in the last five years, some are organizers for their local or national unions," Mr. Muste said. "Others are business agents, complaint clerks and

local committeemen. Two have been executives of other labor colleges, two are on national labor papers, and many are conducting workers' education classes in their own localities."

Brookwood is governed by a board of directors in which the trade unions that have established scholarships have a majority vote. The students, alumni, and faculty are also represented on the board. The school is affiliated with the Workers' Education Bureau of America.

A holder to fasten an auto map to the steering wheel of a car has been devised.

## IN MEMORIAM

(Continued from page 45)

for every trait that goes to make up a man's man; therefore be it

Resolved, That Local Union No. 66, I. B. of E. W., has lost one of its most esteemed and valuable members, the International Organization one of its most loyal supporters, the state of Texas and the city of Houston one of their noblest citizens; therefore be it further

Resolved, That a copy of these resolutions, though it so feebly expresses our sorrow, our love and admiration for Brother Hulme, be spread upon the minutes of this meeting, a copy be sent to our Official Journal for publication and a copy be sent to the bereaved wife and family of our departed Brother.

GEORGE L. GARRETT,  
J. B. TURK,  
J. S. POWER,  
U. M. ROBERTS,  
A. H. HARRIS,  
Committee.

## Michael H. Mahoney, L. U. No. 9

We, the members of Local Union No. 9, have been called upon to pay our last tribute of respect to our beloved Brother, Michael H. Mahoney, who was for many years a true and valued member of our organization; therefore be it.

Resolved, That we extend our sympathy to his sorrowing family, his relatives and friends; and be it further

Resolved, That a copy of these resolutions be sent to our Journal for publication, that a copy be spread on the minutes of our local, and that a copy be sent to his family.

EMMETT GREEN,  
DAN MANNING,  
HARRY SLATER,  
Committee.

## George T. McLean, L. U. No. 574

Once more the Angel of Death has invaded our midst and taken from us our friend and Brother, George T. McLean. He who was always working for the interest of our organization and spoke wisely in our councils.

We shall always cherish the memory of so

kind and faithful a Brother, and though we question not the Divine will, nevertheless we shall mourn his loss; therefore be it

Resolved, That we, as members of Local No. 574, International Brotherhood of Electrical Workers, extend our heartfelt sympathy to his wife in this her hour of bereavement, and be it further

Resolved, That our charter be draped for 30 days, a copy of this resolution be sent to his wife, one spread upon the minutes of this local union and one be sent to our Journal for publication.

W. B. SPAWN,  
W. A. BARRETT,  
Committee.

## Richard Morecroft, L. U. No. 125

It is with regret that we record the death of our late Brother Richard Morecroft, who passed away November 11, 1926, at Dundee, Oreg.; therefore be it

Resolved, That we extend our heartfelt sympathy to the bereaved widow; and be it further

Resolved, That we drape our charter for 30 days in his memory and send a copy of these resolutions for publication in the Official Journal.

J. SCOTT MILNE,  
Secretary, L. U. No. 125.

## William Sutherland, L. U. No. 702

Whereas the sudden and unforeseen call of our Heavenly Father has removed from our midst an esteemed friend and Brother, William Sutherland, and

Whereas Local Union No. 702 has suffered the loss of a true and loyal member; therefore be it

Resolved, That the membership of this local extend their deepest sympathy to his sorrowing wife, his relatives and friends; and be it further

Resolved, That we drape our charter for the period of 30 days, that a copy of these resolutions be sent to his wife and relatives, one to our Official Journal for publication and one to be spread on the minutes of our local.

J. H. EUTSLER,  
R. L. BRIDGFORD,  
R. B. SMITH,  
Committee.

## John N. Krahl, L. U. No. 263

It is with extreme sorrow that we, the officers and members of Local Union No. 263, I. B. E. W., call to the attention of the Brothers who have been in the electrical game years ago, that Brother John N. Krahl, who was a member some 30 years ago, known as L. U. No. 188, I. B. E. W., Dubuque, was called by the Almighty God on December 10.

Mr. Krahl was a lineman 30 years ago when the electrical game was still young, and working with our Brother Ely Itney, who is now a member of No. 263, at that time. Twenty-five years ago Brother Krahl was badly burned while working on a pole carrying 2,300 volts, which left him disabled for life, burning his left hand off and three fingers on his right hand. From that time until his death Brother Krahl had been engaged in the picture business, making his own frames with the aid of his two fingers and an artificial hand.

Brother Krahl made friends with everyone and always had the glad hand whenever the line boys drove by his place of business on the line truck. Six years ago his wife died and from then on Krahl lived as he died—alone. This local extends its deepest sympathy to friends of this ex-Brother and lineman of the I. B. E. W.

LOCAL UNION NO. 263,  
EDWIN A. MYERS,  
Press Secretary.

## John Lee, L. U. No. 79

It is with deepest regret that we, the members of Locals Nos. 79 and 43, I. B. E. W., record the death of our late Brother John Lee, whose life was snuffed out by accident, November 7, 1926. Although Brother Lee had been with Local No. 79 but a short time he has left many friends and acquaintances to mourn the loss of a true and loyal member. The death of Brother Lee touched the entire membership of both locals with a deep sense of sympathy, and with those of us who knew him so well the deepest sadness, and we give tears to his memory and flowers to his grave, for no truer, more devoted or loyal man was ever enrolled on the books of the Brotherhood. In every relation of life he was the same true and model man, and his name is now registered on the calendar of saints for the many acts of kindness and benevolence administered while in this earthly life; therefore be it

Resolved, That in respect to his memory our charter be draped for a respectable period, and that a copy of these resolutions be sent to his bereaved family, as well as being inscribed on our records.

EXECUTIVE BOARD,  
Local Union No. 79.

## Al Sugerman, L. U. No. 261

Whereas we, as members of Local Union 261, I. B. E. W., New York City, deeply regret the death of Brother Al Sugerman, that occurred on Sunday, Dec. 20, 1926, and took from our midst a faithful member, and

Whereas in his fellowship we had found in him the spirit of a loyal Brother, therefore be it

Resolved, That the members of Local Union 261, I. B. E. W., extend their most sincere sympathy to his wife and children in their hour of bereavement, and be it further

Resolved, That our charter be draped for a period of thirty days in respect to his memory. And that a copy of these resolutions be sent to his wife and family and one to the International Office for publication in the Official Worker, and a copy be spread on the minutes of our local union.

Signed,  
MICHEL J. BUTLER, President.  
NAT GOLDBERG, Financial Secretary.  
AL SILVERMAN, Recording Secretary.  
T. HISINGER, Trustee.  
JULIUS LEVINE, Trustee.

## Theodore Wotochek, L. U. No. 21

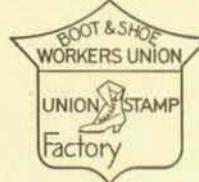
Whereas we as members of Local Union No. 21, I. B. E. W., of Philadelphia, deeply regret the sad death that occurred on Dec. 26, 1926, and took from our midst Brother Theodore Wotochek, a true and faithful member of Local Union No. 21 at his death, and

Whereas in his fellowship we have recognized in him the spirit of a true and loyal Brother; therefore be it

Resolved, That the members of Local Union No. 21 extend their most sincere sympathy to his brother, Rudolph Wotochek, and friends.

## Buy Union Stamped Shoes

We ask all members of organized labor to purchase shoes bearing our Union Stamp on the sole, inner-sole or lining of the shoe. We ask you not to buy any shoes unless you actually see this Union Stamp.



## Boot &amp; Shoe Workers' Union

Affiliated with the American Federation of Labor

246 SUMMER STREET, BOSTON, MASS.

COLLIS LOVELY  
General President

CHARLES L. BAINE  
General Secy-Treas.

in this hour of bereavement, and be it further Resolved, That our charter be draped for 30 days in respect to his memory and a copy of these resolutions be sent to his brother and one to the International Office for publication in the Official Journal and a copy be spread on the minutes of our local union.

JOHN M. LINDSAY,  
Financial Secretary.  
WILLIAM LINDSAY,  
President.  
JAMES J. CAVANAUGH.

#### John Sherry, L. U. No. 53

Whereas it has pleased the Almighty God in His infinite wisdom to suddenly call from our midst our beloved Brother John Sherry.

Whereas we as members of L. U. No. 53, I. B. E. W., have been called upon to pay our final tribute of respect and high esteem to our late Brother, who departed from our midst in the prime of his life which deprives us of his companionship and Brotherly love.

Resolved, That the membership of this local extend their heartfelt sympathy to his bereaved wife, brother and sisters in this dark hour of sorrow; be it further.

Resolved, That we drape our charter for a period of thirty days in his memory, that a copy of these resolutions be spread on the minutes, a copy sent to the Official Journal for publication and a copy be sent the bereaved family.

FRANK WALKER,  
THOMAS M. CASSIDY,  
J. B. DELANEY,  
Committee.

#### POWER MEASUREMENTS IN POLYPHASE CIRCUITS

(Continued from page 18)

voltage are too high for the meter they can be reduced to the proper or safe values by shunts and high resistances in direct current measurements, and by current and voltage transformers when measuring power in alternating current circuits.

When power or energy is to be measured on polyphase circuits conditions are not so simple. In fact the principles involved are often misunderstood. They can, however, be best elucidated by reference to diagrams such as Fig. 28 which shows a delta-connected load with a different number of lamps in the branches. To measure the power or energy delivered to the lamps in such a circuit two instruments are connected as shown. The current coils of the two meters are marked  $S_1$  and  $S_2$ , and the corresponding voltage coils are designated by  $V_1$  and  $V_2$ , and the problem is to show that two properly calibrated meters so connected will measure the power delivered to the lamps. This may be done in either one of two ways; one demonstration is based on instantaneous values of the currents and voltages, and the other uses effective values and the vector diagrams explained in preceding articles. To some readers one method may seem more real while to others the second, so both will be given.

#### Kirchoff's Laws Explained

The first or instantaneous value method is based on two almost self-evident facts, known as Kirchoff's laws. One of these is the statement that if the currents flowing to and from any junction point of a system of conductors be considered, then the intensity or value of the currents flowing towards the point must equal the value or intensity of the currents flowing away from the point. This law is fairly obvious if attention be centered on the junction point of an interconnected water system. The quantity of water flowing towards the junction point must be equal to the quantity flowing away, if there is to be no accumulation of water or if there is no leakage.

The second law is to the effect that the fall of pressure or voltage drop around a closed electrical circuit is equal to the ef-

fective electrical pressure in the circuit. This law is likewise obvious.

Applying these laws to the circuits of Fig. 28, it is obvious that the current in the upper wire at each instant must be equal to the algebraic sum of the currents  $i_1$  and  $i_2$ . Likewise, the current in the lower wire must be equal to the algebraic sum of  $i_2$  and  $i_3$ . The current in the voltage coil  $V_1$  is at each instant proportional to  $e_1$  or the voltage across lamps  $L_1$ . Likewise the current in  $V_2$  is proportional to  $e_2$  or the voltage across lamps  $L_2$ . The deflection or indication of the upper meter is proportional to the product of the currents in the ammeter and voltmeter coils, or in algebraic symbols, the torque on this movable element of upper meter is  $K_1 i_1$ . Likewise the torque on the lower element is  $K_2 i_2$ , and the sum of the readings of the meters must be  $K(e_1 i_1 + e_2 i_2)$ . But according to the first law the current in the upper wire equals  $i_1 + i_2$  and the current in the lower wire is equal to  $i_2 + i_3$ . Replacing the expressions for the currents in the upper and lower wires we have for the sum of the meter readings  $K[e_1(i_1 + i_2) + e_2(i_2 + i_3)] = K[i_1 e_1 + i_2 e_2 + i_3 e_3]$ . Now by applying the second law to the circuit ABC,  $e_3$  must equal  $e_1 + e_2$  as no current circulates in the delta. By substituting  $e_3$  for  $e_1 + e_2$ , the sum of the meter indications is  $K(i_1 e_1 + i_2 e_2 + i_3 e_3)$  which is evidently proportional to the power in the three branches of the delta connected lamps. If the lamps were Y-connected it can be shown by an analysis almost identical with the foregoing that the two meters will indicate correctly the power. It is obvious, therefore, that only two wattmeters are necessary to measure the power in a three-wire three phase circuit.

The vector diagram method of showing that two wattmeters connected as shown in Fig. 28 is the one commonly employed. In this demonstration effective values of the electromotive forces and currents are used in place of the instantaneous values and the power indications of each meter is determined by vectorial addition, subtraction, and multiplication.

In Fig. 28 let  $E_1$ ,  $E_2$ , and  $E_3$  be the effective voltages across BA, AC, and CB, and let  $I_1$ ,  $I_2$ , and  $I_3$  be the corresponding currents. Then if we assume unity power factor for each branch the power is equal to  $E_1 I_1 + E_2 I_2 + E_3 I_3$ . Assuming for the sake of simplicity that the voltages are equal, and the currents likewise, the above expression becomes  $3EI$ , where  $E$  and  $I$  are respectively the voltage and current in one branch of the delta. In the preceding paper it was shown that in terms of the line current and line voltage the power is given by  $\sqrt{3}EI_L$ . The problem is to show that the sum of the readings of the two wattmeters is equal to  $\sqrt{3}E_L I_L$  when the power factor is unity and the load circuit is balanced. To show this, both the magnitude of the line current and its phase with reference to the voltages impressed on the meters must be determined.

In Fig. 29, let  $OE_1$ ,  $OE_2$ , and  $OE_3$  represent both the magnitudes and phase relations of the load voltages and let  $OI_1$ ,  $OI_2$ , and  $OI_3$  be the corresponding load currents. The current in the ammeter coil of the upper meter is equal to the vector difference between  $I_1$  and  $I_2$ . This vector difference is the vector marked  $I_1 - I_2$ . Likewise, the current in the ammeter coil of the lower meter is the vector difference between  $I_2$  and  $I_3$ . This is given by the vector  $I_2 - I_3$ . As this current flows through the lower wattmeter, it is reversed and drawn below  $OE_2$ . So far the composition of the vectors is exactly

like that explained in the December issue of The Journal. The line current in magnitude equals 1.732 times the load current, but in the upper element it leads the voltage by thirty degrees, or one-twelfth of a period. That is, the angle between  $E_1$  and  $I_1 - I_2$  is thirty degrees. As the wattmeter torque is proportional to the product of voltage by current by power factor, or phase difference between voltage and current, the upper meter will indicate  $\sqrt{3} EI \cos 30^\circ = .866 EI$ . Likewise, the lower element indicates the product of  $E_2$  by  $I_2 - I_3$  by the cosine of the angle between them. But this angle is likewise thirty degrees, so the indication of the lower meter is also  $.866 EI$  and the sum of the readings is 1.732 EI which is the power consumed in the three branches of the delta.

In the preceding discussion, the load circuits were assumed to be balanced. If an unbalanced load had been assumed, the diagrams would become complicated and difficult to follow.

While the demonstrations given above apply only to a three-wire, three-phase circuit, the principles are more general. These principles may be stated as follows:—In measuring the power or energy supplied to any system through  $n$  wires, the total power is given by the algebraic sum of the readings of one less wattmeters than there are wires. These wattmeters must be connected so that each of the  $n-1$  wires contains a current coil, and the corresponding potential coil is connected between that wire and to some point of remaining wire of the  $n$  wires. Thus to measure the power in a four-wire three-phase system, three wattmeter elements are needed, and to measure the power in a six-wire, six-phase system, five meter elements are necessary.

The foregoing is merely an introduction into power measurements in polyphase circuits, for there are many special types of connections which complicate power measurements. These measurements are, however, the most important in the central station industry.

#### COMBINED EARNING POWER OF AMERICAN PEOPLE STAGGERS HUMAN IMAGINATION

(Continued from page 10)

his average intelligence now knows that the best and surest way of doing this is to follow the average man in increasing his insurance protection.

Electrical workers can all see the arrow pointing directly to the Union Cooperative Insurance Association, Machinists' Building, Washington, D. C., and are following the arrow to find happiness and contentment in the realization of protection by means of increased and adequate life insurance.

Others, also, of other crafts, or professions, are realizing the benefits and reaping the advantages of *Union Life Insurance for Union Men, Their Families and Friends*, as supplied by this union life insurance company.

#### Taking It Easy

An officer on board a battleship was drilling his men: "I want every man to lie on his back, put his legs in the air, and move them as if he were riding a bicycle," he explained. "Now begin." After a short effort one of the men stopped. "Why have you stopped, Cassidy?" asked the officer. "If you please, Sor," was the reply, "Ol'm coasting!" —National Guardsman.

## NOTICES

This is to advise the membership that one Vansace Whitley, one W. J. Mayfield, one Tom Johnson, and one Tom Sessions, are ratting against Local No. 108, Tampa, Fla. They are, or have been, working for the Bigby Electric Company. Said company is very unfair to our organization.

H. S. B.,  
Press Secretary, I. U. No. 108, Tampa, Fla.

Anyone knowing the whereabouts of Harry Corkum, of Italy Cross, Lun County, N. S., who was formerly a member of Local Union No. 96, of Worcester, Mass., and was last heard from at Los Angeles, Calif., in February, 1925, please get in touch with Mrs. Letitia Feener, Italy Cross, Lun County, N. S., his aunt, as she desires to advise him of a double bereavement in his home.

G. M. BUGNIAZET,  
International Secretary.

Harry Dodge, kindly get in touch with your sister, Dr. Grace Hadley Hall, 2238 West Monroe Street, Chicago, Ill., or the undersigned. Brother Dodge left Chicago with Brother Wingle Marshall about three months ago for the West coast.

DAN MANNING,  
Local No. 9.

### Tacoma's Municipal Plant Thrives on Low Rates and Good Service

It's mighty profitable owning their own light and power system, citizens of Tacoma, Wash., will tell you. They are paying the lowest rates for light and power in the United States. Tacoma housewives are running their electric cook stoves for 1 cent a kilowatt hour; elsewhere they'd be paying 8 cents or 10 cents. "Chimneyless houses" are a usual sight in Tacoma—electric heating is charged only  $\frac{1}{2}$  cent per kilowatt hour plus a minimum annual charge of \$9 per 1,000 watts of connected load. No more ashes to shake—no worries over the high price of coal in Tacoma.

Electricity for lighting and cooking is charged at 5 cents per kilowatt hour for a small minimum amount based on the floor area content of buildings, adjusted to give owners of large or modest homes some use of current at 1 cent per kilowatt hour, to which rate the charge drops direct from 5 cents. Housewives generally run their vacuum cleaners, water heaters, electric irons and other appliances and do their cooking at the 1 cent rate.

"Oh, yes!" some sour opponent of municipal power ownership will interrupt. "The rates may be low, but it all comes out of the citizens' taxes! This is the usual argument.

But Tacoma points to the \$930,000 of profits cleared for the year 1925 as a pretty strong refutation of that theory. Not a penny of tax money has gone to pay for the city's light and power system—the citizens have paid for the plant while paying for electricity at rates that are the envy of other communities.

And now Tacoma is adding a block of 50,000 more horsepower to the municipal system to take care of industries and citizens who want to enjoy the use of more electricity at the city's rates. The first unit of the new Cushman project, a huge hydro-electric development, has just been completed at a cost of \$5,250,000. When demands for power again exceed the city's

supply there will again be 90,000 horsepower available in the second unit.

Tacoma's first experiment in municipal power development was in 1912 with a hydro-electric plant on the Nisqually river, generating 32,000 horsepower. By 1925 the city had added a 12,000 horsepower steam auxiliary plant and was buying all the power available from Seattle's municipal system and from private power companies.

The Tacoma Ledger speaks enthusiastically of the way in which this first plant, built at a cost of \$2,355,000, has contributed to the prosperity and industrial prestige of the city as well as to the daily comfort of all citizens, while at the same time paying off its indebtedness and preparing the financial road for the larger Cushman project.

#### A Sure Thing

The workman was digging. The wayfarer of the inquisitive turn of mind stopped for a moment to look on.

"My good man," said the wayfarer at length, "what are you digging for?"

The workman looked up. "Money," he replied.

"Money!" ejaculated the amazed wayfarer, "And when do you expect to strike it?"

"On Saturday," replied the workman, as he resumed operations.—National Cash Register.



#### THE I. B. E. W. WATCH CHARM

Bears the Brotherhood emblem in enamel on a very ornamental base of gold filled scroll work.

\$2.50

#### Almost Million

#### Death Claims Paid From December 1, 1926, Including December 31, 1926

| Local | Name               | Amount     |
|-------|--------------------|------------|
| 53    | John Sherry        | \$1,000.00 |
| 134   | Mat Murphy         | 1,000.00   |
| 125   | R. Morecraft       | 1,000.00   |
| 134   | Edw. Dowman        | 475.00     |
| 711   | Edw. C. Irwin      | 1,000.00   |
| 666   | L. B. Gilman       | 1,000.00   |
| 865   | P. W. Racznak      | 200.00     |
| 3     | John C. Brennan    | 1,000.00   |
| 65    | Geo. Hossack       | 475.00     |
| 134   | Geo. F. Holt, Jr.  | 300.00     |
| 3     | Edw. J. O'Neill    | 825.00     |
| 508   | F. A. Muse         | 1,000.00   |
| 3     | D. M. Grace        | 1,000.00   |
| 5     | A. Westcott        | 1,000.00   |
| 3     | Harry Mackay       | 1,000.00   |
| 102   | Raymond Clark      | 1,000.00   |
| 347   | Jas. Martin Lennan | 650.00     |
| 21    | Theo. Wotoczek     | 1,000.00   |

\$14,925.00

Total claims paid from December 1, including December 31, 1926 \$14,925.00  
Total claims previously paid 931,685.00  
\$946,610.00

#### Vain Scheme

Mrs. Crawford—How is it you and your husband can't agree about a budget?

Mrs. Crabshaw—He tries to put over too many thrift weeks on me.—Wall Street Journal.

#### Send It In!

If you've got something on your chest—  
Just so it ain't too solemn—  
A piece of prose, a poem, a jest—  
We'd like it for this column.  
—Minneapolis Labor Review.

## PRICE LIST OF SUPPLIES

|  |        |
|--|--------|
| Application Blanks, per 100                                    | \$ .75 |
| Arrears, Official Notice of, per 100                           | .50    |
| Account Book, Treasurer's                                      | 1.00   |
| Buttons, S. G. (medium)  | 1.00   |
| Buttons, S. G. (small)   | .75    |
| Buttons, R. G.   | .60    |
| Buttons, Cuff, S. G., per pair                                 | 3.75   |
| Buttons, Cuff, R. G., per pair                                 | 1.50   |
| Button, Gold-faced Diamond Shaped                              | 2.00   |
| Books, set of  | 14.00  |
| Book, Minute for R. S. (small)                                 | 2.00   |
| Book, Minute for R. S. (large)                                 | 3.00   |
| Book, Day  | 1.50   |
| Book, Roll Call  | 1.50   |
| Carbon for receipt books                                       | .05    |
| Charm, vest chain slide  | 5.00   |
| Constitution, per 100  | 5.00   |
| Electrical Worker, Subscription per year                       | 1.00   |
| Envelopes, Official, per 100                                   | 1.00   |
| Ledger, loose leaf binder, Financial Secretary's, 26 tab index | 6.50   |
| Ledger pages to fit above ledger, per 100                      | 1.50   |
| Ledger, Financial Secretary's, 100 pages                       | 3.00   |
| Ledger, Financial Secretary's, 200 pages                       | 8.75   |
| Ledger, Financial Secretary's, 400 pages                       | 8.75   |
| (Extra Heavy Binding)  |        |
| Labels, Metal, per 100   | 1.25   |
| Labels, Paper, per 100   | .15    |
| Labels, large size for house wiring, per 100                   | .35    |
| Obligation Cards, double, per dozen                            | .25    |
| Paper, Official Letter, per 100                                | .75    |
| Permit Card, per 100   | .75    |
| Rituals, extra, each   | .25    |
| Receipt Book (300 receipts)                                    | 2.00   |
| Receipt Book (750 receipts)                                    | 4.00   |
| Receipt Book, Financial Secretary's                            | .35    |
| Receipt Book, Treasurer's                                      | .35    |
| Receipt Holders, each  | .25    |
| Ring, 14 karat gold  | 9.50   |
| Ring, 14 karat green and white gold                            | 10.00  |
| Seal, cut of   | 1.00   |
| Seal   | 4.00   |
| Seal (pocket)  | 7.50   |
| Traveling Cards, per dozen                                     | .75    |
| Withdrawal Cards, with Trans. Cds., per dozen                  | .50    |
| Working Cards, per 100   | .50    |
| Warrant Book, for R. S.  | .50    |



NOTE—The above articles will be supplied when the requisite amount of cash accompanies the order. Otherwise the order will not be recognized. All supplies sent by us have postage or express charges prepaid.

ADDRESS, G. M. BUGNIAZET, I. S.

LOCAL UNION OFFICIAL RECEIPTS FROM NOVEMBER 11  
 TO DECEMBER 10, 1926

| L. U. | NUMBERS | L. U.   | NUMBERS | L. U.  | NUMBERS | L. U. | NUMBERS | L. U.  | NUMBERS |        |
|-------|---------|---------|---------|--------|---------|-------|---------|--------|---------|--------|
| 1     | 759087  | 759240  | 127     | 701458 | 701473  | 288   | 618109  | 618142 | 461     | 454104 |
| 1     | 705141  | 705160  | 129     | 860340 | 860358  | 291   | 187861  | 187870 | 466     | 431581 |
| 2     | 515809  | 516000  | 130     | 671385 | 671645  | 292   | 736831  | 737065 | 468     | 296046 |
| 2     | 752251  | 752300  | 131     | 269468 | 269470  | 293   | 12940   | 12951  | 470     | 839403 |
| 4     | 192687  | 192713  | 133     | 836235 | 836247  | 294   | 10134   | 10146  | 471     | 858035 |
| 5     | 900181  | 900300  | 134     | 654751 | 654850  | 295   | 26542   | 26550  | 474     | 633001 |
| 6     | 748531  | 748920  | 134     | 653251 | 653660  | 296   | 861251  | 861266 | 481     | 458221 |
| 7     | 524662  | 524794  | 134     | 653188 | 653250  | 298   | 459470  | 459493 | 481     | 769501 |
| 8     | 580614  | 580657  | 134     | 648001 | 648750  | 300   | 851678  | 851693 | 482     | 165599 |
| 9     | 892161  | 892400  | 134     | 467636 | 468090  | 305   | 306288  | 306307 | 492     | 341839 |
| 10    | 14405   | 14436   | 134     | 510751 | 511500  | 306   | 870835  | 870849 | 493     | 426961 |
| 12    | 499691  | 499696  | 134     | 648751 | 649500  | 307   | 878305  | 878313 | 494     | 560147 |
| 14    | 877656  | 877709  | 134     | 650251 | 651000  | 308   | 551722  | 551835 | 494     | 891001 |
| 15    | 125519  | 125938  | 134     | 651751 | 652500  | 310   | 641286  | 641460 | 500     | 702001 |
| 17    | 665461  | 666000  | 134     | 651001 | 651750  | 311   | 392709  | 392754 | 500     | 187447 |
| 17    | 762001  | 762550  | 134     | 647251 | 648000  | 312   | 910501  | 910550 | 501     | 570691 |
| 18    | 617201  | 617250  | 134     | 654001 | 654220  | 313   | 846361  | 846392 | 501     | 903751 |
| 18    | 756751  | 756910  | 134     | 505368 | 505500  | 317   | 263672  | 263692 | 503     | 15316  |
| 20    | 633349  | 634847  | 140     | 436222 | 436261  | 318   | 873290  | 873354 | 504     | 136879 |
| 21    | 634531  | 634548  | 141     | 298967 | 298990  | 321   | 58849   | 58870  | 507     | 868453 |
| 26    | 896471  | 896620  | 143     | 122603 | 122615  | 322   | 97218   | 97235  | 509     | 400488 |
| 27    | 78341   | 78350   | 145     | 667011 | 667070  | 323   | 534606  | 534718 | 509     | 33601  |
| 28    | 444522  | 444570  | 146     | 223397 | 223402  | 324   | 837868  | 837886 | 511     | 12476  |
| 30    | 577589  | 577616  | 150     | 28435  | 28449   | 325   | 856481  | 856518 | 514     | 663851 |
| 32    | 410179  | 410198  | 153     | 198677 | 198700  | 326   | 897765  | 897805 | 515     | 631034 |
| 34    | 451356  | 451462  | 154     | 846829 | 846835  | 328   | 32401   | 32419  | 516     | 849623 |
| 35    | 324693  | 324750  | 156     | 27791  | 27808   | 328   | 850946  | 850950 | 517     | 4705   |
| 35    | 529501  | 529551  | 159     | 452099 | 452116  | 329   | 25381   | 25400  | 520     | 203012 |
| 36    | 500611  | 500670  | 161     | 11185  | 11202   | 330   | 369188  | 369195 | 521     | 408846 |
| 37    | 239886  | 239941  | 164     | 601717 | 601870  | 333   | 428222  | 428250 | 522     | 550869 |
| 38    | 481809  | 482250  | 169     | 432189 | 432217  | 333   | 898501  | 898538 | 524     | 13887  |
| 38    | 485251  | 485727  | 172     | 12011  | 12016   | 334   | 277626  | 277283 | 527     | 226415 |
| 39    | 602281  | 602454  | 173     | 20322  | 20335   | 339   | 873451  | 873461 | 528     | 44092  |
| 40    | 746405  | 746526  | 174     | 878003 | 878007  | 341   | 927113  | 927150 | 528     | 774001 |
| 41    | 636216  | 636470  | 175     | 357581 | 357600  | 343   | 853993  | 854000 | 529     | 7997   |
| 43    | 539170  | 539470  | 175     | 12601  | 12610   | 345   | 828043  | 828072 | 531     | 872577 |
| 44    | 738101  | 738112  | 177     | 601084 | 601294  | 347   | 666398  | 666487 | 532     | 699095 |
| 45    | 743328  | 743339  | 178     | 396856 | 396860  | 348   | 422411  | 422531 | 533     | 537579 |
| 46    | 376625  | 376784  | 180     | 270648 | 270654  | 349   | 569865  | 569969 | 535     | 523143 |
| 47    | 456225  | 456237  | 181     | 582317 | 582413  | 350   | 432409  | 432416 | 536     | 446489 |
| 48    | 373,651 | 3738870 | 183     | 50454  | 50479   | 351   | 841337  | 841350 | 537     | 287169 |
| 50    | 607076  | 607125  | 185     | 237566 | 237600  | 352   | 170816  | 170854 | 540     | 858929 |
| 51    | 25786   | 25800   | 186     | 707401 | 707411  | 353   | 412433  | 412500 | 548     | 848040 |
| 51    | 702901  | 702911  | 188     | 432079 | 432090  | 353   | 878551  | 878672 | 551     | 290566 |
| 52    | 637093  | 637280  | 191     | 40416  | 40449   | 355   | 433968  | 433980 | 556     | 91091  |
| 53    | 753794  | 753842  | 192     | 391300 | 391348  | 356   | 854751  | 854770 | 558     | 844324 |
| 54    | 876537  | 876554  | 193     | 56393  | 56643   | 358   | 433885  | 433928 | 560     | 56854  |
| 55    | 101934  | 101957  | 194     | 740421 | 740526  | 361   | 633459  | 633461 | 561     | 18303  |
| 56    | 552319  | 552380  | 195     | 630457 | 630538  | 362   | 867687  | 867738 | 565     | 14724  |
| 57    | 133317  | 133333  | 196     | 516295 | 516320  | 364   | 457179  | 457217 | 567     | 624796 |
| 59    | 517941  | 518080  | 197     | 10934  | 10942   | 365   | 809712  | 809747 | 568     | 879191 |
| 60    | 751528  | 751620  | 199     | 781931 | 781935  | 367   | 627073  | 627125 | 569     | 553925 |
| 64    | 877151  | 877240  | 200     | 738861 | 738976  | 368   | 23558   | 23574  | 570     | 505694 |
| 65    | 646251  | 646500  | 201     | 401923 | 401932  | 369   | 330730  | 330750 | 573     | 460035 |
| 65    | 782251  | 782340  | 209     | 126696 | 126728  | 369   | 906001  | 906029 | 574     | 227249 |
| 66    | 615641  | 615750  | 210     | 445915 | 445985  | 371   | 397794  | 397800 | 574     | 745501 |
| 66    | 763501  | 763630  | 213     | 256039 | 256322  | 373   | 11762   | 11778  | 575     | 247345 |
| 67    | 194121  | 194147  | 214     | 758258 | 758400  | 374   | 874073  | 874088 | 580     | 703513 |
| 68    | 519315  | 519491  | 215     | 740282 | 740317  | 375   | 745496  | 745511 | 584     | 751007 |
| 69    | 23211   | 23220   | 216     | 833026 | 833032  | 376   | 422329  | 422342 | 585     | 3221   |
| 73    | 656444  | 656497  | 224     | 416718 | 416801  | 377   | 583635  | 583725 | 587     | 242601 |
| 75    | 7356    | 7361    | 225     | 847330 | 847346  | 379   | 13261   | 13299  | 588     | 424311 |
| 76    | 675063  | 675124  | 231     | 701146 | 701159  | 382   | 220380  | 220450 | 591     | 677425 |
| 77    | 618254  | 618275  | 232     | 706524 | 706535  | 384   | 423258  | 423268 | 593     | 263239 |
| 77    | 617643  | 617745  | 233     | 846732 | 846747  | 390   | 676551  | 676575 | 594     | 265404 |
| 78    | 842382  | 842393  | 234     | 376322 | 376347  | 391   | 41150   | 41155  | 598     | 842139 |
| 80    | 32701   | 32709   | 235     | 876784 | 876821  | 392   | 434689  | 434778 | 599     | 614310 |
| 80    | 856923  | 856950  | 236     | 704419 | 704427  | 393   | 731468  | 731478 | 601     | 135655 |
| 81    | 531535  | 531620  | 237     | 568542 | 568571  | 394   | 389206  | 389213 | 603     | 860731 |
| 83    | 757567  | 757919  | 238     | 440942 | 441000  | 396   | 214299  | 214384 | 610     | 614211 |
| 84    | 604253  | 604471  | 238     | 901501 | 901522  | 397   | 133398  | 133438 | 611     | 602929 |
| 86    | 547644  | 547820  | 241     | 15608  | 15621   | 398   | 16878   | 16886  | 613     | 545009 |
| 87    | 50984   | 50992   | 241     | 375592 | 375600  | 400   | 338691  | 338750 | 620     | 628406 |
| 88    | 897014  | 897030  | 245     | 430081 | 431050  | 402   | 541873  | 541900 | 625     | 543418 |
| 89    | 166862  | 166867  | 246     | 576116 | 576156  | 403   | 562069  | 562140 | 627     | 570898 |
| 91    | 40562   | 40566   | 247     | 93888  | 93912   | 411   | 29401   | 29422  | 630     | 863315 |
| 93    | 683981  | 683993  | 249     | 633811 | 633840  | 413   | 59926   | 60000  | 633     | 174011 |
| 94    | 7724    | 7751    | 255     | 201662 | 201683  | 413   | 776251  | 776315 | 636     | 347593 |
| 95    | 558057  | 558066  | 256     | 414330 | 414369  | 416   | 667321  | 667350 | 640     | 609157 |
| 96    | 596273  | 596420  | 257     | 40043  | 40071   | 416   | 772501  | 772503 | 641     | 419379 |
| 100   | 554306  | 554328  | 258     | 838535 | 838542  | 417   | 540970  | 540974 | 642     | 770408 |
| 101   | 573808  | 573829  | 259     | 438534 | 438597  | 418   | 472267  | 472310 | 646     | 820358 |
| 102   | 603202  | 603269  | 261     | 581822 | 582000  | 420   | 85420   | 85433  | 647     | 871657 |
| 103   | 587401  | 588710  | 261     | 900751 | 901496  | 421   | 159524  | 15959  | 648     | 345508 |
| 104   | 538096  | 538290  | 262     | 300665 | 300690  | 426   | 860912  | 860920 | 649     | 384511 |
| 106   | 584496  | 584560  | 263     | 702367 | 702389  | 427   | 26957   | 27000  | 651     | 366590 |
| 107   | 675931  | 675990  | 266     | 97323  | 97332   | 428   | 174477  | 174504 | 653     | 57191  |
| 109   | 1471    | 1490    | 267     | 116166 | 116173  | 429   | 251634  | 251658 | 656     | 536448 |
| 110   | 756052  | 756144  | 268     | 417202 | 417214  | 430   | 28703   | 28727  | 659     | 540702 |
| 111   | 41489   | 41499   | 269     | 605404 | 605493  | 431   | 9467    | 9473   | 660     | 397985 |
| 112   | 436408  | 436423  | 271     | 630887 | 630917  | 434   | 601277  | 601284 | 661     | 703819 |
| 113   | 367012  | 367939  | 273     | 419095 | 419100  | 435   | 529041  | 529100 | 662     | 864251 |
| 114   | 423809  | 423815  | 273     | 710701 | 710703  | 437   | 395681  | 395720 | 664     | 555552 |
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| 996   | 842735  | 842750   | 1154                 | 374571 | 374600  |                        |             |       | 261-901008.               |
| 1002  | 750035  | 750086   | 1156                 | 572819 | 572926  |                        |             |       | 284-571715.               |
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| 1024  | 447238  | 447280   |                      |        |         | 20-638368, 407.        |             |       | 323-534607-620.           |
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| 1047  | 534841  | 534854   | 180-270641-647.      |        |         | 56-552363-364.         |             |       | 400-338693.               |
| 1054  | 384522  | 384529   | 194-740420.          |        |         | 65-646263, 782312-313. |             |       | 417-54094.                |
| 1057  | 103973  | 103974   | 216-833025.          |        |         | 340.                   |             |       | 458-54758.                |
| 1065  | 397851  | 397854   | 238-440941.          |        |         | 66-763626, 656.        |             |       | 482-165606, 609.          |
| 1072  | 27128   | 27176    | 246-576146-155.      |        |         | 73-656493.             |             |       | 492-341866.               |
| 1086  | 705330  | 705360   | 284-571732.          |        |         | 83-757603, 609, 736.   |             |       | 501-570749.               |
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| 1144  | 533313  | 533368   | 864-398744-749.      |        |         | 132.                   |             |       | 702-764561.               |

### Electric Shocks Dangerous

Important new facts about death from electric shock are contained in the British Factories and Workshops Report, recently issued by the government of England. Although the low voltages commonly used in supplying electricity to houses and factories are not usually dangerous, there are instances, the report states, in which death has been caused even by these relatively feeble currents. In most instances these

deaths have occurred when the current passes across the body; for example, from one hand to the opposite foot. Fifty per cent of the deaths reported to the British authorities during the period of the report were caused by voltages of less than 240 volts. All of these were due to alternating current, which the experts appear to consider more dangerous to life (the voltage being the same) than is direct current. It is urged that especial caution be used in installing and handling wires which carry alternating

current. Users of electricity are urged to be careful when handling electric fixtures under circumstances which might provide the current with a path across the body; for example, when the feet are in contact with wet ground, when standing in a bathtub containing water or when the opposite hand is touching some metal object.

DR. E. E. FREE.

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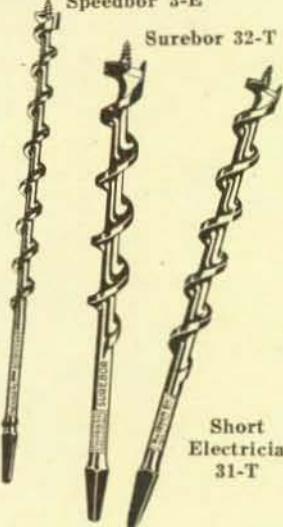
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The Journal positively refuses to act as a non-conductor. In the future, as in the past, it is determined to send the light coursing down the lines of national and international communication.

## JOURNAL OF ELECTRICAL WORKERS

## THAT WAGE

IT is true that happiness is not a mere affair of food and clothes and that culture is not a product of the pocketbook. But as life is now organized, the leisure and the opportunity for culture and development are closed to those who do not possess at least moderate incomes. If the system of prices withholds advantages from the families of workingmen, the community is not developing and using to the full its human resources. As a result its culture must remain on a lower level. The real things of life—goods, services, leisure, and what not—which these prices grant to the laborer or withhold from him are his wage. If he is to be efficient, if he is to have leisure for his own use, if the native gifts of his children are to be developed, if his family is to share in the culture which is the common heritage of the community, his wage must hold the possibility of these things.

—WALTON HAMILTON.